This paper reports on a study of the administrative behavior of school principals made through direct observation and a set of unique categories. Study objectives were to describe (1) the sources of principals' problems, (2) the principals' initial reactions to problem stimuli, (3) the patterns of principals' decisionmaking, (4) the premises employed by principals in making initial responses to problems, and (5) a tested system of categories for use by other researchers in studying administrators' decisionmaking behavior. Study results showed that principals' decisionmaking patterns are reactive, rapid, and probably strongly influenced by subordinates. (Author/IMA)
A Description of
Decision Making Patterns of
School Principals

by
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Presented at the
1971
Annual Meeting
of the
American Educational Research Association
February 4 - 7
New York City, New York
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Introduction

If the acquisition of descriptions of phenomena is the first step in developing an empirically based discipline, it can hardly be said that educational administration, as a discipline, is beyond its first step. Descriptions of administrative behavior that have been developed have rested primarily on teachers' reports of characteristic behaviors of their superiors. Typical of these kinds of descriptions are those collected by means of the LBDQ, and the OCDQ. Less frequently have descriptions of administrative behavior been acquired by means of direct surveillance. Examples of studies where descriptions of administrative behavior have been based on direct observation are Laidig, McNeill, Cross, Cross and Bennett, and Darling. The research study reported here was an effort to acquire descriptions of administrative behavior of school principals through direct observation and by means of a set of categories not employed in previous studies.

Decision making has long occupied a central position in the literature on administration. Barnard, Simon, and Griffiths have all accorded considerable significance to the concept of decision making as a focus for the study of administration. A few researchers have dealt with second hand descriptions of the decision making behavior of school administrators and still others have observed the nature of problems that come to educational administrators for resolution. To the knowledge of this writer, however, no researcher has attempted first-hand descriptions of the decision making behavior of educational administrators.

This research effort had the following objectives.

1. To provide quantitative descriptions of the sources of principals' problems (who provides problem stimuli for principals and with what frequency?)

2. To provide quantitative descriptions of principals initial reactions to problem stimuli (what do principals do first when confronted with problems and with what frequency?)

3. To integrate the results of 1 and 2 above to generate quantitative descriptions of patterns of decision making by school principals (What do principals first do when confronted with stimuli from various sources and with what frequency?)


11. Cross and Bennet, Ibid.

12. Darling, Ibid.
4. To provide descriptions of premises employed by principals in making their initial responses to problems (what Sources of Knowledge do principals use in doing what they do?)

5. To provide a tested system of categories which other researchers might employ in studying the decision making behavior of school administrators.

The Generation of Descriptive Categories

The first methodological step was to generate systems of categories for describing the decision making patterns of school principals. Consistent with the nature of the descriptions being sought categories were generated for each of the foci of interest -- Problem stimuli, initial decision making response, and decision premises.

Problem Stimuli Categories

As Katz and Kahn have pointed out, a basic middle management function is the piecing out of structure, a function which derives from the impossibility of completely mechanizing a human organization. While broad general goals may be set for an organization, and gross structures for attaining those goals may be established, breaking down the goals into operational objectives is generally left to lower levels in the organization. Furthermore dynamics within the organization and in its environment prohibit the anticipation of all events in such a way that members of the organization can be automated. Thus, a principal of a school generates structure within structure and employs existing structure to accomplish school objectives.

Signals that additional structure is needed or that existing structure needs to be employed may be considered as the problem stimuli for principals. These signals may be provided for a principal by a number of other persons.

or by the principal himself. In the former case, individuals intentionally present the principal with a problem, as when Teacher X asks for the principal's assistance with a pupil whom the teacher considers to be a behavior problem. It may be that the principal will define the problem differently from the teacher. The principal, for example may view the problem as Teacher X's poor pupil control strategy, while the teacher may consider the problem to be Johnny's recalcitrance. In either instance, Teacher X provides the problem stimuli. In the latter case, where the principal presents himself with a problem, it is because he has seen conditions which he views as less than satisfactory. The satisfactoriness of conditions is, of course, a subjective judgment. One principal walks by a noisy classroom and perceives a situation that is not satisfactory -- a problem. Another principal may walk by the same noisy classroom and regard it as a lively and interesting educational environment -- no problem.

The categories generated for the purpose of describing sources of problem stimuli were based on major classifications of persons within the work environment of principals. The categories of problem stimuli origin were as follows:

1. Subordinates -- Those individuals below the principal in the hierarchical organization (Include teachers, pupils and auxiliary personnel.)

2. Extraordinates -- Those persons not directly affiliated with the school organization (Includes parents.)

3. Hierarchy -- Those persons above the principal in the organization and their staff.

4. Peers -- Other principals within the school system.
Initial Response Categories

A number of systems of categories for decision making steps have been set forth from time to time. These commonly assume an explicit and rational approach to decision-making and typically include steps similar to the following.

1. Perception of a problem
2. Seeking information relevant to the problem.
3. Generation of alternatives
4. Projection of probable consequences of acting on each alternative.
5. Choice, or the making of a concluding decision

The explicit vs. implicit nature of each step places constraints on its observability. Step 1, problem perception, is to some degree observable when persons present problems to the principal or when a principal focuses his attention on objects or events in such a way that it may be inferred that he perceives a problem. Step 2, Seeking Information, and Step 5, Choice, are typically observable (unless the principal decides not to decide). Steps 3 and 4 are rarely if ever observable in the case of a principal going about his daily work. Generating alternatives and projection of consequences are mental processes which administrators would not ordinarily verbalize unless requested to do so.

Since it was desired to rely as heavily as possible on observable phenomena the only categories employed in classifying initial responses to problems were information seeking and concluding decision categories. The category of information seeking was, however, subdivided into various sources which a principal might consult. The categories used in the study to classify initial reactions to problems were as follows.
1. Seeks information from subordinates \((2, \ldots, n)\) (Subordinate \((2, \ldots, n)\) indicates subordinate(s) other than subordinate providing the problem stimuli).

2. Seeks information from extraordinate \((2, \ldots, n)\) (Extraordinate \((2, \ldots, n)\) indicates extraordinate(s) other than the extraordinate providing the problem stimuli).

3. Seeks information from hierarchy \((2, \ldots, n)\) (Hierarchy \((2, \ldots, n)\) indicates member(s) of hierarchy above principal other than one providing the problem stimuli).

4. Seeks information from peer \((2, \ldots, n)\) (Peer \((2, \ldots, n)\) indicates other than peer providing problem stimuli).

5. Seeks information from records

6. Makes concluding decision

Classifications of initial responses which might have been included but were not are those involving information exchange with individuals presenting problems to the principal. Most of the time problems that were presented to principals by other persons were presented orally, face-to-face. This face-to-face presentation of a problem was invariably followed by an exchange of information in which the problem was elaborated and its antecedents clarified. This exchange of information was considered to be a part of the presentation of the problem rather than the principal's initial response and thus was not included among the categories of initial response.

Categories of decision premises

Categories of decision premises were based on knowledge sources from which principals might draw their premises for decision. The following categories were used to classify sources of decision premises.
(1) Administration - Professional knowledge relevant to directing and controlling life in the school organization.

(2) Education - Professional knowledge relevant to philosophical and technical bases underlying instruction of students

(3) Job experience - Knowledge gained as a result of having confronted similar problems in the past

(4) Cultural knowledge - Knowledge which could be assumed to be in possession of the man on the street. (Might also be called "common sense.")

(5) Organizational prescriptions - Rules, orders, policies, etc. handed down from the hierarchy.

Sample and Data Collection Procedures

The sample of principals whose decision making was described by means of the categories outlined in the previous section was drawn from a large urban school system in the Midwest. The sample was composed exclusively of inner city elementary school principals; therefore the generalizability of the descriptions acquired is limited to populations in similar settings.

Each of the principals was observed for two days, during which time the observer recorded the problems that come to the principal for decision and his actions in response to the problems. At the end of each day the observer interviewed the subject to determine (1) which of the five problems confronting him during the day he considered to be the most critical and (2) his premises for deciding as he did on each of the five critical problems.

Based on the observation and interview, vignettes were written for each of the critical problems. These vignettes included a brief description of the problem and its background, the principal's decision on the problem,
and the premise that the principal gave for his decision. (See Figure 1).
Although the initial plan was to derive 90 vignettes (9 principals x 2 days x 5 problems), on four occasions a subject could designate only four problems during the day which he could regard as critical. Thus data from only 86 vignettes were available for analysis.

Figure 1
Illustration of Critical Problem Vignette

Problem:
The secretary reminded the principal of a report from the homebound teacher indicating that a child who had suffered brain injury in an automobile accident the previous summer was due to return to school soon. The effect of the injury on the child's intellectual performance was not known. The child had been in the first grade during the school year prior to the accident. A decision would have to be made regarding the child's grade placement.

Decision: To request the school psychologist to evaluate the child's capacity for school performance.

Premise: The psychologist had the expertise to make an assessment.

Results
The data were abstracted along three dimensions: problem origin, principal's response, and decision premise. For each dimension the problem was classified according to the systems of categories outlined in a previous section of this paper.

In Table 1 the data relevant to sources of problem stimuli are presented. Problem stimuli were provided by subordinates in 44 cases (51%), by the principal's perception of unsatisfactory conditions in 19 cases (22%), by extraordinates in 15 cases (18%), by members of the hierarchy or their staff
in 7 cases (8%), and by a peer in one instance (1%).

Data concerning the principals' initial responses to the problems are presented in Table 2. These data indicate that the most frequent initial response to a problem was to make a concluding decision (54 instances, or on 63% of the critical problem). For reasons that will be elaborated below this datum is to some extent misleading in suggesting that the initial response was an instantaneous concluding decision. Other categories in which initial responses were recorded, in order of frequency, were: seeks information from subordinate (21 instances, or 18%); seeks information from extraordinate (23 instances, or 16%). Only rarely, (one case each) was the principal's initial response to seek information from the hierarchy, from peers, or from records.

In order to better discern the principals' decision making patterns, data on sources of problem stimuli and initial responses were consolidated to form a two dimensional table, Table 3 with the X dimension consisting of categories of sources of problem stimuli and the y dimension consisting of initial responses, so that the table indicates the principals' initial responses to problem stimuli coming from various sources. The modal category was that in which the principal's initial response was to make a concluding decision in response to stimuli from subordinates. As has been mentioned, the frequency in this category is somewhat misleading, because regardless of the amount of information which a subordinate provided a principal upon presenting the principal with a problem, such information was considered as an elaboration of the problem, and was not categorized on the initial response dimension as an information seeking response. The almost invariable pattern of events reflected in this category was a face-to-face presentation
Table 1
Problem Stimuli Origins of Eighty-Six Critical Problems of Inner-City Elementary School Principals

<table>
<thead>
<tr>
<th>Origin</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subordinates</td>
<td>44</td>
<td>51</td>
</tr>
<tr>
<td>Self</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Extraordinate</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Peers</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>86</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2
Inner-City Elementary School Principals' Initial Responses to Eighty-Six Critical Problems

<table>
<thead>
<tr>
<th>Initial Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make Concluding Decision</td>
<td>54</td>
<td>63</td>
</tr>
<tr>
<td>Seek Information from Subordinate (2, n)</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Seek Information from Extraordinate (2, n)</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Seek Information from Hierarchy (2, n)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Seek Information from Peer (2, n)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Seek Information from Records</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>86</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 3

Inner-City Elementary Principals' Initial Responses to Problem Stimuli From Various Sources

<table>
<thead>
<tr>
<th>Problem Stimuli Origins</th>
<th>Subordinates</th>
<th>Extraordinates</th>
<th>Hierarchy</th>
<th>Peers</th>
<th>Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Responses</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Seek Information from Subordinate ((2,n))</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Seek Information from Extraordinate ((2,n))</td>
<td>10</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Seek Information from Hierarchy ((2,n))</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Seek Information from Peer ((2,n))</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seek Information from Records</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes Concluding Decision</td>
<td>29</td>
<td>33</td>
<td>7</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>
of a problem by a subordinate, followed by information exchange concerning the problem and a concluding decision by the principal under some influence of the subordinate.

A second classification with a relatively high frequency was that category in which the principal himself perceived a problem and made a concluding decision without consulting another person. Other patterns having frequencies worthy of mention were patterns in which subordinates presented problems to which principals responded by seeking information from extraordinaires; patterns in which extraordinaires presented problems to which principals responded by seeking information from subordinates; and patterns in which extraordinaires presented a problem on which principals made an immediate decision.

Decision Premises

Decision premises were those considerations which, according to the subjects, guided them in arriving at decisions on each of the eighty-six critical problems. Table 4 presents the data on decision premises and an example of statements of premises for each category. In order of frequency, the categories of knowledge from which premises were drawn were administration, education, cultural, job experience, and organizational prescriptions.

Discussion

The pattern of problem origins and initial principal responses suggests that the principals in this study operated almost entirely within the social system of the local attendance area, at least with respect to decisions which the subjects regarded as critical. Only eight of the 86 problems (those originated by peers and members of the hierarchy) had their geneses outside
Table 4

Categorical Frequencies of Premises Used by Principals of Inner City Elementary Schools in Making Decisions on Eighty-Six Critical Problems

<table>
<thead>
<tr>
<th>Source of Premise</th>
<th>Number</th>
<th>%</th>
<th>Sample Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>46</td>
<td>53</td>
<td>&quot;The psychologist has the expertise to make an assessment.&quot;</td>
</tr>
<tr>
<td>Education</td>
<td>16</td>
<td>18</td>
<td>&quot;My approval will reinforce the boy's good conduct.&quot;</td>
</tr>
<tr>
<td>Job Experience</td>
<td>6</td>
<td>7</td>
<td>&quot;That's the way we handled it last year and it worked out OK.&quot;</td>
</tr>
<tr>
<td>Cultural</td>
<td>15</td>
<td>18</td>
<td>&quot;There are two sides to every question and both the kids were partly to blame.&quot;</td>
</tr>
<tr>
<td>Organizational</td>
<td>3</td>
<td>4</td>
<td>&quot;This is a decision governed by district policy and state law.&quot;</td>
</tr>
</tbody>
</table>

...the local attendance area. This suggests a social isolation of the principal from other members of the school administration. One might speculate that the creation of an administrative team which would include the subjects of this study would be difficult. A reasonable hypothesis stemming from these data would be that the norms to which these principals attend are those that are generated within their own building rather than those generated by the hierarchy.

A second feature of the data worthy of notice is the rather rapid pace of decision making by the principals, with concluding decisions coming soon after the problem stimuli. It seems likely that this rapid pace derives from a large problem volume which principals typically handle. A previous study 14 has indicated that principals handle an average of approximately 100 problems per day.14 Under such conditions it can hardly be expected that principals reach decisions through the deliberative, self conscious classic steps in decision making.

A third noteworthy feature of the results is the person dependent character of the information that the principals employed in arriving at decisions. In only one of eighty-six decisions did the subjects use data on record as a source of information. Other information sources were persons who had opportunities to filter the data which they presented to the principals. This suggests considerable opportunity for these persons to manipulate the principals by providing information of their own selection.

In summary, the decision making patterns of principals in the study could be characterized as reactive, probably influenced strongly by subordinates, and rapid. One might well raise questions concerning the extent to which administrative planning and evaluation are possible when principals are occupied in this manner.

Regarding the premises for the principals' decisions, it may be said that for the subjects of this study, the stereotype of the large city principal with antennae extended for reception of hierarchical guidance appears to be invalid. Only rarely did principals consider organizational prescriptions in making decisions and more rarely did they consult a member of the hierarchy for explicit direction. It is acknowledged that the principals may have been guided by internalized school district norms which they did not verbalize.

The hunch of this writer after this research is that a proper analogy for a school system may be a solar system in which the inhabitants of each planet (school) are in intense interaction with one another, are scarcely aware of inhabitants of other planets, and only occasionally receive heat and light from the sun (central office).