Substitutes for Leadership: Their Meaning and Measurement

STEVEN KERR
University of Southern California

AND

JOHN M. JERMIER
The Ohio State University

Current theories and models of leadership seek to explain the influence of the hierarchical superior upon the satisfaction and performance of subordinates. While disagreeing with one another in important respects, these theories and models share an implicit assumption that while the style of leadership likely to be effective may vary according to the situation, some leadership style will be effective regardless of the situation. It has been found, however, that certain individual, task, and organizational variables act as "substitutes for leadership," negating the hierarchical superior's ability to exert either positive or negative influence over subordinate attitudes and effectiveness. This paper identifies a number of such substitutes for leadership, presents scales of questionnaire items for their measurement, and reports some preliminary tests.

A number of theories and models of leadership exist, each seeking to most clearly identify and best explain the presumably powerful effects of leader behavior or personality attributes upon the satisfaction and performance of hierarchical subordinates. These theories and models fail to agree in many respects, but have in common the fact that none of them systematically accounts for very much criterion variance. It is certainly true that data indicating strong superior-subordinate relationships have sometimes been reported. In numerous studies, however, conclusions have had to be based on statistical rather than practical significance, and hypothesis support has rested upon the researcher's ability to show that the trivially low correlations obtained were not the result of chance.

Current theories and models of leadership have something else in common: a conviction that hierarchical leadership is always important. Even situational approaches to leadership share the assumption that while the style of leadership likely to be effective will vary according to the situation, some leadership style will always be effective regardless of the situation. Of course, the extent to which this assumption is explicated varies greatly, as does the degree to which each theory is dependent upon

Requests for reprints should be sent to Dr. Steven Kerr, Department of Management, University of Southern California, Los Angeles, CA 90007.
the assumption. Fairly explicit is the Vertical Dyad Linkage model developed by Graen and his associates (Graen, Dansereau, & Minami, 1972; Dansereau, Cashman, & Graen, 1973), which attributes importance to hierarchical leadership without concern for the situation. The Fiedler (1964, 1967) Contingency Model also makes the general assumption that hierarchical leadership is important in situations of low, medium, and high favorableness, though predictions about relationships between LPC and performance in Octants VI and VII are qualified (Fiedler & Chemers, 1974, p. 82). Most models of decision-centralization (e.g., Tannenbaum & Schmidt, 1958; Heller & Yukl, 1969; Vroom & Yetton, 1973; Bass & Valenzi, 1974) include among their leader decision-style alternatives one whereby subordinates attempt a solution by themselves, with minimal participation by the hierarchical superior. Even in such cases, however, the leader is responsible for initiating the method through delegation of the problem, and is usually described as providing (structuring) information.

The approach to leadership which is least dependent upon the assumption articulated above, and which comes closest to the conceptualization to be proposed in this paper, is the Path-Goal Theory (House, 1971; House & Mitchell, 1974). Under circumstances when both goals and paths to goals may be clear, House and Mitchell (1974) point out that "attempts by the leader to clarify paths and goals will be both redundant and seen by subordinates as imposing unnecessary, close control." They go on to predict that "although such control may increase performance by preventing soldiering or malingering, it will also result in decreased satisfaction."

This prediction is supported in part by conclusions drawn by Kerr, Schriesheim, Murphy, and Stogdill (1974) from their review of the consideration-initiating structure literature, and is at least somewhat consistent with results from a few recent studies. A most interesting and pertinent premise of the theory, however, is that even unnecessary and redundant leader behaviors will have an impact upon subordinate satisfaction, morale, motivation, performance, and acceptance of the leader (House & Mitchell, 1974; House & Dessler, 1974). While leader attempts to clarify paths and goals are therefore recognized by Path-Goal Theory to be unnecessary and redundant in certain situations, in no situation are they explicitly hypothesized by Path-Goal (or any other leadership theory) to be irrelevant.

This lack of recognition is unfortunate. As has already been mentioned, data from numerous studies collectively demonstrate that in many situations these leader behaviors are irrelevant, and hierarchical leadership (as operationalized in these studies) per se does not seem to matter. In fact, leadership variables so often account for very little criterion variance that
a few writers have begun to argue that the leadership construct is sterile altogether, that "the concept of leadership itself has outlived its usefulness" (Miner, 1975, p. 200). This view is also unfortunate, however, and fails to take note of accurate predictions by leadership theorists even as such theorists fail to conceptually reconcile their inaccurate predictions.

What is clearly needed to resolve this dilemma is a conceptualization adequate to explain both the occasional successes and frequent failures of the various theories and models of leadership.

**SUBSTITUTES FOR LEADERSHIP**

A wide variety of individual, task, and organizational characteristics have been found to influence relationships between leader behavior and subordinate satisfaction, morale, and performance. Some of these variables (for example, job pressure and subordinate expectations of leader behavior) act primarily to influence which leadership style will best permit the hierarchical superior to motivate, direct, and control subordinates. The effect of others, however, is to act as "substitutes for leadership," tending to negate the leader's ability to either improve or impair subordinate satisfaction and performance.

Substitutes for leadership are apparently prominent in many different organizational settings, but their existence is not explicated in any of the dominant leadership theories. As a result, data describing formal superior-subordinate relationships are often obtained in situations where important substitutes exist. These data logically ought to be, and usually are, insignificant, and are useful primarily as a reminder that when leadership styles are studied in circumstances where the choice of style is irrelevant, the effect is to replace the potential power of the leadership construct with the unintentional comedy of the "Law of the instrument."¹

What is needed, then, is a taxonomy of situations where we should not be studying "leadership" (in the formal hierarchical sense) at all. Development of such a taxonomy is still at an early stage, but Woodward (1973) and Miner (1975) have laid important groundwork through their classifications of control, and some effects of nonleader sources of clarity have been considered by Hunt (Note 2) and Hunt and Osborn (1975). Reviews of the leadership literature by House and Mitchell (1974) and Kerr et al. (1974) have also proved pertinent in this regard, and suggest that individual, task, and organizational characteristics of the kind outlined in Table 1 will help to determine whether or not hierarchical leadership is likely to matter.

¹ Abraham Kaplan (1964, p. 28) has observed: "Give a small boy a hammer, and he will find that everything he encounters needs pounding."
### TABLE 1
**SUBSTITUTES FOR LEADERSHIP**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Will tend to neutralize</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>of the subordinate</strong></td>
<td></td>
</tr>
<tr>
<td>1. ability, experience, training, knowledge</td>
<td>X</td>
</tr>
<tr>
<td>2. need for independence</td>
<td>X X</td>
</tr>
<tr>
<td>3. &quot;professional&quot; orientation</td>
<td>X X</td>
</tr>
<tr>
<td>4. indifference toward organizational rewards</td>
<td>X X</td>
</tr>
<tr>
<td><strong>of the task</strong></td>
<td></td>
</tr>
<tr>
<td>5. unambiguous and routine</td>
<td>X</td>
</tr>
<tr>
<td>6. methodologically invariant</td>
<td>X</td>
</tr>
<tr>
<td>7. provides its own feedback concerning accomplishment</td>
<td>X</td>
</tr>
<tr>
<td>8. intrinsically satisfying</td>
<td>X</td>
</tr>
<tr>
<td><strong>of the organization</strong></td>
<td></td>
</tr>
<tr>
<td>9. formalization (explicit plans, goals, and areas of responsibility)</td>
<td>X</td>
</tr>
<tr>
<td>10. inflexibility (rigid, unbending rules and procedures)</td>
<td>X</td>
</tr>
<tr>
<td>11. highly-specified and active advisory and staff functions</td>
<td>X</td>
</tr>
<tr>
<td>12. closely-knit, cohesive work groups</td>
<td>X X</td>
</tr>
<tr>
<td>13. organizational rewards not within the leader's control</td>
<td>X X</td>
</tr>
<tr>
<td>14. spatial distance between superior and subordinates</td>
<td>X X</td>
</tr>
</tbody>
</table>

**Conceptual domain of substitutes for leadership.** Since Table 1 is derived from previously-conducted studies, substitutes are only suggested for the two leader behavior styles which dominate the research literature. The substitutes construct probably has much wider applicability, however, perhaps to hierarchical leadership in general.

It is probably useful to clarify some of the characteristics listed in Table 1. "Professional orientation" is considered a potential substitute for lead-
leadership because employees with such an orientation typically cultivate horizontal rather than vertical relationships, give greater credence to peer review processes, however informal, than to hierarchical evaluations, and tend to develop important referents external to the employing organization (Filley, House, & Kerr, 1976). Clearly, such attitudes and behaviors can sharply reduce the influence of the hierarchical superior.

"Methodologically invariant" tasks may result from serial interdependence, from machine-paced operations, or from work methods which are highly standardized. In one study (House, Filley, & Kerr, 1971, p. 26), invariance was found to derive from a network of government contracts which "specified not only the performance requirements of the end product, but also many of the management practices and control techniques that the company must follow in carrying out the contract."

Invariant methodology relates to what Miner (1975) describes as the "push" of work. Tasks which are "intrinsically satisfying" (another potential substitute listed in Table 1) contribute in turn to the "pull" of work. Miner believes that for "task control" to be effective, a force comprised of both the push and pull of work must be developed. At least in theory, however, either type alone may act as a substitute for hierarchical leadership.

Performance feedback provided by the work itself is another characteristic of the task which potentially functions in place of the formal leader. It has been reported that employees with high growth need strength in particular derive beneficial psychological states (internal motivation, general satisfaction, work effectiveness) from clear and direct knowledge of the results of performance (Hackman & Oldham, 1976; Oldham, 1976). Task-provided feedback is often: (1) the most immediate source of feedback given the infrequency of performance appraisal sessions (Hall & Lawler, 1969); (2) the most accurate source of feedback given the problems of measuring the performance of others (Campbell, Dunnette, Lawler, & Weick, 1970); and (3) the most self-evaluation evoking and intrinsically motivating source of feedback given the controlling and informational aspects of feedback from others (DeCharms, 1968; Deci, 1972, 1975; Greller & Herold, 1975). For these reasons, the formal leader’s function as a provider of role structure through performance feedback may be insignificant by comparison.

Cohesive, interdependent work groups and active advisory and staff personnel also have the ability to render the formal leader's performance feedback function inconsequential. Inherent in mature group structures are stable performance norms and positional differentiation (Bales & Strodtebeck, 1951; Borgatta & Bales, 1953; Stogdill, 1959; Lott & Lott, 1965; Zander, 1968). Task-relevant guidance and feedback from others may be provided directly by the formal leader, indirectly by the formal leader through the primary work group members, directly by the primary
work group members, by staff personnel, or by the client. If the latter four instances prevail, the formal leader's role may be quite trivial. Cohesive work groups are, of course, important sources of affiliative need satisfaction.

Programming through impersonal modes has been reported to be the most frequent type of coordination strategy employed under conditions of low-to-medium task uncertainty and low task interdependence (Van de Ven, Delbecq, & Koenig, 1976). Thus, the existence of written work goals, guidelines, and groundrules (organizational formalization) and rigid rules and procedures (organizational inflexibility) may serve as substitutes for leader-provided coordination under certain conditions. Personal and group coordination modes involving the formal leader may become important only when less costly impersonal strategies are not suitable.

The measurement of substitutes for leadership. This section will discuss the assessment of leadership substitutes through the administration of a questionnaire. Such an approach obviously will provide information about respondent perceptions, not "objective" properties, of the variables under study. It is not the intention of this paper to enter into the controversy over the relative merits of paper-and-pencil and other approaches, or the investigation of "psychological" rather than "actual" attributes. In common with most other variables in the behavioral sciences, potential substitutes for leadership can be measured in more than one way, and when feasible these ways should be employed in combination.

In seeking to devise a questionnaire to measure the potential substitutes listed in Table 1, it was initially assumed that scales already in existence would probably be adequate. This turned out not to be the case. To understand why, consider the following items, taken from scales which strongly relate to the substitutes construct:

—I feel certain about how much authority I have.
—I know exactly what is expected of me (from the "Role Clarity" scale, Rizzo, House, & Lirtzman, 1970).
—The mission of work groups is clearly defined.
—Objectives are clearly communicated and understood (from the "Goal Consensus and Clarity" scale, House & Rizzo, 1972).
—Schedules, programs, or project specifications are used to guide work.
—Group rules or guidelines to direct efforts are very clear (from the "Formalization" scale, House & Rizzo, 1972).
—How much are you required to depend on your superior for the nonfinancial resources (information, supplies, etc.) necessary for the performance of your job?
---To what extent are you able to act independently of your superior in performing your job duties? (from the "Job Autonomy/Independence from Others" scale, Wigdor, Note 4).

The problem with such items is that it is impossible to determine whether they refer to substitutes of the kind suggested in Table 1, or whether they refer to leadership itself. For example, suppose we learn that respondents must depend on the leader for information, and cannot act independently in performing job duties. Is this a commentary on their level of training and experience, or does it tell us instead about the leader's managerial style? Similarly, if subordinates express certainty about how much authority they have, does such certainty arise from organizational formalization, or from frequent access to and communications with the leader?

Such questions should not be taken as criticism of the scales mentioned above. Since theories have not been concerned with substitutes for leadership, scales used in leadership research have not been required to distinguish leader-provided autonomy, goal and role clarity, etc., from autonomy and clarity which stem from other sources. It may become necessary in the future to make such distinctions, however, and the scales described in Table 2 have been constructed for this purpose. These scales are presented in the same order as the listing of characteristics in Table 1 to which they refer. It should be noted that the measure of Organizational Formalization is very similar to House and Rizzo's (1972) Formalization scale, and some items in the Organization Rewards not Within the Leader's Control scale derive from Wigdor's (Note 4) measure of Job Autonomy/Independence from Others. Unlike early scales, however, those in Table 2 have been written so as to permit a distinction between effects which are the result of leadership and those which stem from substitutes for leadership.

**TELEVISION SCRIPT PRETEST**

*Administration of the questionnaire.* To learn something about scale properties, nine subscales in Table 2 were administered to 153 male and female juniors and seniors who were enrolled in a first course in organizational behavior.² Complete and usable information was obtained from 148 of them. The administration was intended to (a) provide information about the subscales' internal reliabilities; (b) assess their degree of interdependence; and (c) permit at least a crude validation of responses, by examin-

² The Task-Provided Feedback Concerning Accomplishment, Organizational Inflexibility, Spatial Distance, and Need for Independence scales were not included in this administration.
TABLE 2
Questionnaire Items for the Measurement of Substitutes for Leadership*

(1) Ability, experience, training, and knowledge
—Because of my ability, experience, training or job knowledge, I have the competence
to act independently of my immediate superior in performing my day-to-day duties.
—Because of my ability, experience, training or job knowledge, I have the competence
to act independently of my immediate superior in performing unusual and unexpected
job duties.
—Due to my lack of experience and training, I must depend upon my immediate superior to
provide me with necessary data, information, and advice. (R)

(2) Professional orientation
—For feedback about how well I am performing I rely on people in my occupational special-
ty, whether or not they are members of my work unit or organization.
—I receive very useful information and guidance from people who share my occupational
speciality, but who are not members of my employing organization.
—My job satisfaction depends to a considerable extent on people in my occupational
speciality who are not members of my employing organization.

(3) Indifference toward organizational rewards
—I cannot get very enthused about the rewards offered in this organization, or about the
opportunities available.
—This organization offers attractive payoffs to people it values. (R)
—In general, most of the things I seek and value in this world cannot be obtained from
my job or my employing organization.

(4) Unambiguous, routine, and methodologically invariant tasks
—Because of the nature of the tasks I perform, on my job there is little doubt about the
best way to get the work done.
—Because of the nature of the work I do, I am often required to perform nonroutine tasks.
(R)
—Because of the nature of my work, at the beginning of each work day I can predict
with near certainty exactly what activities I will be performing that day.
—There is really only one correct way to perform most of my tasks.
—My job duties are so simple that almost anyone could perform them after a little bit of
instruction and practice.
—It is so hard to figure out the correct approach to most of my work problems that second-
guessers would have a field day. (R)

(5) Task-provided feedback concerning accomplishment
—After I've done something on my job I can tell right away from the results I get whether
I've done it correctly.
—My job is the kind where you can make a mistake or an error and not be able to see that
you've made it. (R)
—Because of the nature of the tasks I perform, it is easy for me to see when I've done
something exceptionally well.
(6) *Intrinsically satisfying tasks*

- I get a great deal of personal satisfaction from the work I do.
- It is hard to imagine that anyone could enjoy performing the tasks that I perform on my job. (R)
- My job satisfaction depends to a considerable extent on the nature of the actual tasks I perform on the job.

(7) *Organizational formalization*

- Clear, written goals and objectives exist for my job.
- My job responsibilities are clearly specified in writing.
- In this organization, performance appraisals are based on written standards.
- Written schedules, programs and work specifications are available to guide me on my job.
- My duties, authority, and accountability are documented in policies, procedures, and job descriptions.
- Written rules and guidelines exist to direct work efforts.
- Written documents (such as budgets, schedules, and plans) are used as an essential part of my job.
- There are contradictions and inconsistencies among the written statements of goals and objectives. (R)
- There are contradictions and inconsistencies among the written guidelines and ground-rules. (R)

(8) *Organizational inflexibility*

- In this organization the written rules are treated as a bible, and are never violated.
- People in this organization consider the rulebooks and policy manuals as general guidelines, not as rigid and unbending. (R)
- In this organization anytime there is a policy in writing that fits some situation, everybody has to follow that policy very strictly.

(9) *Advisory and staff functions*

- For feedback about how well I am performing, I rely on staff personnel inside the organization, based outside my work unit or department.
- In my job I must depend on staff personnel located outside of my work unit or department to provide me with data, reports, and informal advice necessary for my job performance.
- I receive very useful information and guidance from staff personnel who are based outside my work unit or department.

(10) *Closely-knit, cohesive, interdependent work groups*

- For feedback about how well I am performing I rely on members of my work group other than my superior.
- The quantity of work I turn out depends largely on the performance of members of my work group other than my superior.
- The quality of work I turn out depends largely on the performance of members of my work group other than my superior.
—I receive very useful information and advice from members of my work group other than my superior.
—I am dependent on members of my work group other than my superior for important organizational rewards.
—My job satisfaction depends to a considerable extent on members of my work group other than my superior.

(11) **Organizational rewards not within the leader's control**
—On my job I must depend on my immediate superior to provide the necessary financial resources (such as budget and expense money). (R)
—On my job I must depend on my immediate superior to provide the necessary non-financial resources (such as file space and equipment). (R)
—My chances for a promotion depend on my immediate superior's recommendation. (R)
—My chances for a pay raise depend on my immediate superior's recommendation. (R)
—My immediate superior has little say or influence over which of his or her subordinates receives organizational rewards.
—The only performance feedback that matters to me is that given me by my immediate superior. (R)
—I am dependent on my immediate superior for important organizational rewards. (R)

(12) **Spatial distance between superior and subordinates**
—the nature of my job is such that my immediate superior is seldom around me when I'm working.
—On my job my most important tasks take place away from where my immediate superior is located.
—My immediate superior and I are seldom in actual contact or direct sight of one another.

(13) **Subordinate need for independence**
—I like it when the person in charge of a group I am in tells me what to do. (R)
—When I have a problem I like to think it through myself without help from others.
—It is important for me to be able to feel that I can run my life without depending on people older and more experienced than myself.

* Response choices to each item include:
(5) Almost always true or almost completely true,
(4) Usually true, or true to a large extent,
(3) Sometimes true, sometimes untrue or true to some extent,
(2) Usually untrue, or untrue to a large extent, and
(1) Almost always untrue or almost completely untrue.
(R) indicates reflected item.
Students were asked to take on the role of one of the following television characters, and to reply to the questions from the vantage point of that character:

—Mary Richards, working for Lou Grant (*The Mary Tyler Moore Show*).

—Hawkeye Pierce, working for Colonel Sherman Potter (*M.A.S.H.*).

—Archie Bunker, working for the loading dock supervisor in his plant (*All in the Family*).

Respondents who were unfamiliar with all three characters were asked to reply from the vantage point of "a low-level assembly line worker, working for a foreman in an automobile plant."

It should be emphasized that the credibility of these data is limited. Respondents undoubtedly are differentially familiar with the various television characters, and assembly line worker "replies" were obviously based mainly on stereotypes. Furthermore, inferences had to be made with regard to questions which could not unequivocally be answered from the television scripts. These problems could have been partially resolved by asking respondents to reply from the perspectives of characters in a written case study. However, it is unlikely that a case study could create as much completeness and richness of characterization as is provided by a continuing television series.

**Subscale properties.** Reliabilities and intercorrelations for the nine subscales are shown in Table 3. As can be seen from the table, all reliabilities are above .7, and five exceed .8.

Table 3 also suggests that the subscales may be considered, in this sample at least, to be essentially independent. Only one of 36 intercorrelations is greater than .5. On the other hand, 14 are below .1, and 29 are less than .3. Furthermore, all relatively high intercorrelations are readily comprehensible from a conceptual standpoint. Those which exceed .4 are:

**Intrinsically Satisfying Tasks,**
—positively with Ability, Experience, Training and Knowledge
—negatively with Indifference toward Organizational Rewards
—negatively with Unambiguous, Routine, and Methodologically Invariant Tasks

**Ability, Experience, Training, and Knowledge,**
—negatively with Unambiguous, Routine, and Methodologically Invariant Tasks

**Professional Orientation,**
—positively with Advisory and Staff Functions

**Subscale means and standard deviations.** Table 4 summarizes means and standard deviations, by character, for each potential leadership sub-
<table>
<thead>
<tr>
<th>Subscale title</th>
<th>Reliability*</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Ability, experience, training, and knowledge</td>
<td>.85</td>
<td>1</td>
<td>.06</td>
<td>-.07</td>
<td>-.45</td>
<td>.41</td>
<td>-.21</td>
<td>.03</td>
<td>-.18</td>
<td>.15</td>
</tr>
<tr>
<td>(2) Professional orientation</td>
<td>.74</td>
<td>1</td>
<td>-.08</td>
<td>-.26</td>
<td>.07</td>
<td>.04</td>
<td>.45</td>
<td>.20</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>(3) Indifference toward organizational rewards</td>
<td>.85</td>
<td>1</td>
<td>.03</td>
<td>-.47</td>
<td>-.29</td>
<td>-.26</td>
<td>-.03</td>
<td>.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Unambiguous, routine, and methodologically invariant tasks</td>
<td>.78</td>
<td>1</td>
<td>-.56</td>
<td>.32</td>
<td>-.34</td>
<td>.00</td>
<td>-.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Intrinsically satisfying tasks</td>
<td>.85</td>
<td>1</td>
<td>.06</td>
<td>.26</td>
<td>.03</td>
<td>-.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Organizational formalization</td>
<td>.77</td>
<td>1</td>
<td>.17</td>
<td>.09</td>
<td>-.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7) Advisory and staff functions</td>
<td>.80</td>
<td>1</td>
<td>.14</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) Closely-knit, cohesive interdependent work groups</td>
<td>.78</td>
<td>1</td>
<td>-.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(9) Organizational rewards not within the leader's control</td>
<td>.81</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Reliabilities were calculated using the Kuder–Richardson Formula 8.
stitute. Despite the crudeness of the data in Table 4, some interesting insights emerge.

For our hypothetical assembly line worker, the characteristic with the greatest potential to negate the leader’s influence is the routine and unambiguous nature of the job duties (mean = 4.3). According to Table 1, whether the leader behaves in a structuring manner may in this situation be an irrelevant question. Scale means show no strong substitutes for leader-provided consideration, however, and questions relating to relationship-oriented behavior by the hierarchical superior may therefore by highly relevant.

For Mary Richards, the strongest potential leadership substitute is the intrinsic satisfaction she (presumably) obtains from the tasks she performs (mean = 4.3). Table 1 suggests that this could act as a substitute for leader-provided consideration, and on the show she does seem happy in her work despite the erratic attempts at warmth and collegiality displayed by her superior. She is also seen as able and knowledgeable (mean = 4.0), and under some circumstances might for this reason be unresponsive to leader-provided structure as well. However, Table 4 also shows that she is very interested in organizational rewards (least indifferent of the four characters described), and that her superior is seen as controlling these rewards to a high degree (more than the superior of any other character). As a consequence, hierarchical leadership is probably not irrelevant in this situation. (This point will be elaborated upon shortly).

For Hawkeye Pierce, the strongest substitute for hierarchical leadership is his personal skill, training, and job knowledge (mean = 4.2). Table 1 indicates that these qualities should obviate the need for leader-provided structure, and he does in fact perform his work decisively and competently on the show despite the fact that his superior gives him virtually no structure. Pierce is also indifferent to organizational rewards (more so than the other characters), and in any case his superior is seen as lacking control over such rewards. In Pierce’s case, no clear alternatives to leader-provided consideration behavior appear in Table 4, perhaps because such likely substitutes for a surgeon as “professional orientation” and “intrinsic satisfaction from tasks performed” are less likely to be salient under combat conditions. Pierce might therefore welcome and benefit from relationship-oriented leader behavior. For the most part, however, it is not evident from either Table 4 or the television show that hierarchical leadership exerts much influence upon Hawkeye Pierce’s performance or satisfaction.

3 On one occasion her superior, encountering a situation clearly crying out for some show of supportive leadership, finally and reluctantly exhorted his staff to “keep up the fair work!”
### TABLE 4
**MEANS AND STANDARD DEVIATIONS, BY CHARACTER**

<table>
<thead>
<tr>
<th>Subscale title</th>
<th>Mary Richards (N = 27)</th>
<th>Hawkeye Pierce (N = 60)</th>
<th>Archie Bunker (N = 41)</th>
<th>Assembly-Line Worker (N = 20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Ability, experience, training, and knowledge</td>
<td>4.0 .73</td>
<td>4.2 .69</td>
<td>4.1 .82</td>
<td>2.5 .82</td>
</tr>
<tr>
<td>(2) Professional orientation</td>
<td>3.1 .73</td>
<td>3.0 .78</td>
<td>2.3 .87</td>
<td>2.4 .67</td>
</tr>
<tr>
<td>(3) Indifference toward organizational rewards</td>
<td>2.2 .48</td>
<td>3.7 1.00</td>
<td>2.9 .88</td>
<td>3.6 .72</td>
</tr>
<tr>
<td>(4) Unambiguous, routine, and methodologically invariant tasks</td>
<td>2.7 .50</td>
<td>2.8 .69</td>
<td>3.4 .60</td>
<td>4.3 .66</td>
</tr>
<tr>
<td>(5) Intrinsically satisfying tasks</td>
<td>4.3 .50</td>
<td>3.4 .88</td>
<td>3.5 .82</td>
<td>2.2 .96</td>
</tr>
<tr>
<td>(6) Organizational formalization</td>
<td>2.9 .56</td>
<td>2.5 .69</td>
<td>2.8 .49</td>
<td>3.1 .74</td>
</tr>
<tr>
<td>(7) Advisory and staff functions</td>
<td>3.1 .73</td>
<td>2.6 .91</td>
<td>2.1 .68</td>
<td>1.9 .61</td>
</tr>
<tr>
<td>(8) Closely-knit, cohesive, interdependent work groups</td>
<td>3.5 .55</td>
<td>3.3 .72</td>
<td>3.3 .91</td>
<td>3.7 .46</td>
</tr>
<tr>
<td>(9) Organizational rewards not within the leader's control</td>
<td>2.1 .53</td>
<td>3.1 .74</td>
<td>2.3 .62</td>
<td>2.3 .82</td>
</tr>
</tbody>
</table>

* A scale mean of 5.0 would indicate that the characteristic is perceived to be present to the maximum degree, while a 1.0 would suggest its virtual absence. The closer any scale mean comes to 5.0, the more likely it is that the characteristic will act as a substitute for hierarchical leadership.

The data pertaining to Archie Bunker should be viewed with particular caution since *All in the Family*, unlike the other shows used for this study, focuses upon the character's home rather than work environment. Table 4 scale means suggest that for Archie, as for Hawkeye Pierce, the strongest potential substitute for leadership is his own experience and job knowledge. Similarity between Pierce's and Bunker's situation is not, however, very great. Pierce's personal competence probably stems from extensive formal training, while Bunker's is the result of his having spent many years in essentially the same position. Furthermore, the job which Bunker is competent at is, according to Table 4, much more routine and methodologically invariant. An important final difference is that compared to Pierce, Bunker is much more concerned with organizational rewards, and his superior is seen as controlling rewards to a great degree. This would probably cause Bunker to be at least somewhat influenced by his hierarchical superior's leadership style.

Summarizing what has been discussed in this section of the paper, the data presented in Tables 3 and 4 suggest that in this sample at least, the
nine subscales administered are essentially independent and have adequate internal reliabilities. They also yield readily-interpretable data which plausibly describe the presence or absence of substitutes for leadership in the work situations of those who are (hypothetically) responding.

FIELD STUDIES

To further demonstrate the validity and reliability of the constructs developed in this paper, and to investigate their importance in actual organizational settings, two field studies were conducted. Data were gathered using the 55-item substitutes for leadership questionnaire presented in Table 2, and various leader behavior-subordinate outcome measures.

Samples and procedure. In both of the organizational studies, police officers in a large Midwestern city filled in the questionnaire during normal working hours. Police organizations provide settings to severely test the import of leader substitutes since formal rank and command control are essential elements which enhance the police supervisor's role (Wilson & McLaren, 1972). If important leader substitutes are found in these settings, their presence in other organizations could reasonably be assumed.

In the first study, 54 sworn University police officers of rank less than sergeant participated; in the second study, 113 sworn City police officers of rank less than sergeant participated. Subjects were guaranteed anonymity prior to filling in the questionnaire.

Subscale properties. Internal reliability and correlation coefficients for the 13 subscales are presented in Table 5. Nearly all of the subscales exhibit a satisfactory level of internal consistency in both samples. Where the estimates of reliability are less than .7 for a measure in one sample (task-provided feedback, inflexibility, and organizational rewards not within the leader's control), adequate levels of reliability were obtained in the other sample. Thus, these subscales meet acceptable standards of reliability for preliminary research, and may be employed to further assess the validity of the substitutes for leadership construct.

As in the student sample discussed above, subscale intercorrelations (Table 5) are modest, suggesting that these conceptually distinct varieties of leader substitutes tap relatively unique content domains.

In the sample of City police, only four of 78 correlations coefficients exceed .3, and only two are in excess of .4. In the sample of University police, 14 of 66 correlations exceed .3, but only three are in excess of .4.

4 In the University police sample the Need for Independence scale was not included.
### TABLE 5

**SUBSCALE RELIABILITIES AND INTERCORRELATIONS**

<table>
<thead>
<tr>
<th>Field studies</th>
<th>Subscale title</th>
<th>Reliability*</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>University police</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. AETK***</td>
<td>.83</td>
<td>.85</td>
<td>-.06</td>
<td>-.08</td>
<td>-.07</td>
<td>.14</td>
<td>.16</td>
<td>.02</td>
<td>-.06</td>
<td>.10</td>
<td>-.13</td>
<td>-.02</td>
<td>.20</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>2. PROF</td>
<td>.81</td>
<td>.81</td>
<td>.32</td>
<td>.00</td>
<td>.28</td>
<td>.20</td>
<td>-.01</td>
<td>.19</td>
<td>.15</td>
<td>.55</td>
<td>.33</td>
<td>-.24</td>
<td>-.28</td>
<td>-.05</td>
<td></td>
</tr>
<tr>
<td>3. INDORE</td>
<td>.82</td>
<td>.82</td>
<td>-.26</td>
<td>-.10</td>
<td>-.04</td>
<td>-.16</td>
<td>-.48</td>
<td>-.10</td>
<td>.07</td>
<td>.00</td>
<td>.13</td>
<td>.18</td>
<td>.06</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>4. ROUTIN</td>
<td>.74</td>
<td>.70</td>
<td>-.08</td>
<td>-.18</td>
<td>-.12</td>
<td>.06</td>
<td>-.07</td>
<td>.27</td>
<td>.27</td>
<td>.03</td>
<td>.06</td>
<td>-.17</td>
<td>-.21</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td>5. TSKFB</td>
<td>.79</td>
<td>.67</td>
<td>.28</td>
<td>.14</td>
<td>-.20</td>
<td>.38</td>
<td>.21</td>
<td>.22</td>
<td>.01</td>
<td>.23</td>
<td>.18</td>
<td>-.18</td>
<td>.11</td>
<td>-.12</td>
<td></td>
</tr>
<tr>
<td>6. INSAT</td>
<td>.80</td>
<td>.72</td>
<td>.26</td>
<td>-.36</td>
<td>-.27</td>
<td>.32</td>
<td>.23</td>
<td>.05</td>
<td>.12</td>
<td>.02</td>
<td>-.11</td>
<td>.20</td>
<td>-.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. ORFORM</td>
<td>.85</td>
<td>.77</td>
<td>-.17</td>
<td>.16</td>
<td>-.21</td>
<td>.39</td>
<td>.47</td>
<td>.21</td>
<td>.34</td>
<td>.30</td>
<td>.04</td>
<td>-.26</td>
<td>.07</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td>8. INFLEX</td>
<td>.53</td>
<td>.70</td>
<td>.04</td>
<td>-.27</td>
<td>.01</td>
<td>.33</td>
<td>.14</td>
<td>-.12</td>
<td>.29</td>
<td>.03</td>
<td>.20</td>
<td>-.12</td>
<td>-.02</td>
<td>-.12</td>
<td></td>
</tr>
<tr>
<td>9. ADSTF</td>
<td>.80</td>
<td>.76</td>
<td>.28</td>
<td>.29</td>
<td>-.39</td>
<td>-.15</td>
<td>.02</td>
<td>.08</td>
<td>.07</td>
<td>.10</td>
<td>.27</td>
<td>-.17</td>
<td>.06</td>
<td>-.10</td>
<td></td>
</tr>
<tr>
<td>10. CLOSE</td>
<td>.79</td>
<td>.79</td>
<td>.09</td>
<td>.54</td>
<td>-.23</td>
<td>-.15</td>
<td>.24</td>
<td>.44</td>
<td>.36</td>
<td>-.03</td>
<td>.40</td>
<td>-.20</td>
<td>-.02</td>
<td>-.09</td>
<td></td>
</tr>
<tr>
<td>11. ORNWLC</td>
<td>.81</td>
<td>.63</td>
<td>.22</td>
<td>.05</td>
<td>.17</td>
<td>.11</td>
<td>-.07</td>
<td>-.23</td>
<td>-.14</td>
<td>-.09</td>
<td>-.05</td>
<td>-.31</td>
<td>-.02</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>12. SPDIST</td>
<td>.85</td>
<td>.82</td>
<td>.04</td>
<td>.10</td>
<td>.31</td>
<td>-.23</td>
<td>-.04</td>
<td>.04</td>
<td>-.11</td>
<td>-.13</td>
<td>.19</td>
<td>-.04</td>
<td>.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. NINDEP</td>
<td></td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Reliabilities were calculated using the Kuder-Richardson Formula 8.
** City police sample above diagonal (n=113); University Police sample below diagonal (n=49).

\[ p < .05 \text{ if } r \geq .20 \quad p < .05 \text{ if } r \geq .29 \]
\[ p < .01 \text{ if } r \geq .25 \quad p < .01 \text{ if } r \geq .38 \]

*** See Table 2 for Legend.
Subscale means and standard deviations. Table 6 presents means and standard deviations for potential leadership substitutes in both police samples. While quite similar on most characteristics, some interesting differences among groups did emerge.

For example, City police perceived their organization to be significantly more formalized and rule-inflexible \( (p < .01) \) than did University police. This probably reflects the fact that the University policing function is a relatively new addition to the criminal justice system in the city. Standardized rules and policies are less prevalent, and are somewhat less likely to be enforced, in an organization at this stage of development. Also, the relatively small size of the University force makes coordination by rules and standard operating procedures less necessary.

University police also reported, on average, greater indifference toward organizational rewards, but higher dependence upon their formal supervisor to administer rewards. They perceived their supervisor to be more spatially distant (with less direct contact) than did City police.

A partial explanation for the finding concerning reward indifference is that University police are better educated (many with college credit toward degrees) than City police (roughly 70% with no college or technical school training). In general, reward packages specific to any organization tend to be less important to those who are externally mobile as a result of previous training and well-developed skills.

There was no relationship between Spatial Distance and Organizational Rewards Not Within the Leader’s Control in either sample (Table 5). This indicates that the leader’s reward power is perceived to be essentially independent of the amount of direct contact between himself and his subordinates. The leader is apparently able to exert outcome control through reward distribution even when behavioral control through direct contact is not possible (Ouchi, 1977).

Thus supervisors among the University police, though characterized as more spatially distant from subordinates than those in the City police organization, nevertheless are perceived to be more influential with respect to organizational reward power. However, given differences in attractiveness of extrinsic rewards to subordinates between the two organizations, one might question whether University police supervisors can transform reward power into interpersonal influence any more effectively than their City police counterparts.

Predictive validity. In a preliminary attempt to assess the criterion-related validity of the substitutes for leadership subscales, City police data were regression analyzed and interpreted. Recall that earlier in this paper it was argued that the emphasis upon hierarchical leadership variables (though they have often failed to share much criterion variance) has retarded attempts to understand subordinate behavior and attitudes.
Police departments, usually characterized by quasi-military organization where the formal leadership function is assumed to be of paramount importance (Bordua & Reiss, 1966; McNamara, 1967) are a case in point. Important leadership substitutes undoubtedly exist, but are usually excluded as predictors of subordinate morale and performance since their contribution is thought to be dwarfed by leadership variables. This portion of the study examines that assumption within the systematic framework presented above, focusing upon the relative predictive power of various substitutes for leadership as well as leader behaviors.5

In addition to the leadership substitutes discussed above, two subordinate outcomes (organizational commitment, role ambiguity) and four varieties of leader behavior were measured. Porter, Steers, Mowday, and Boulian's (1974) Organizational Commitment scale measures expressed willingness to strive toward internalized organizational goals and desire to remain a member. Rizzo, House, and Lirtzman's (1970) Role Ambiguity scale was chosen as the other criterion variable because of its demonstrated reliability and consistent relationships with job satisfaction, tension/anxiety, and performance, as well as its frequent inclusion in

Note that sample size rules out a full-scale test of the interactive influence of several substitutes upon hierarchical leadership. Ideally cases would be selected where substitutes are abundant, then where they are scarce, and then subsamples compared. The validity coefficient where substitutes are abundant should then be relatively low, suggesting that hierarchical leadership influence upon subordinate outcomes has been neutralized.
leadership research (Schuler, Aldag, & Brief, 1977). The KR-8 reliability coefficients for these two criterion variables were .86 and .90, respectively.

*Instrumental and Supportive leader behaviors* were measured using a set of scales designed specifically for use in Path-Goal Theory hypothesis testing (Schriesheim, Note 3). The Instrumental leader behaviors which were measured included: (1) clarification of what is expected of subordinates in their work roles (*Role Clarification* KR-8 = .92, 5 items); assignment of subordinates to specific tasks (*Work Assignment* KR-8 = .64, 5 items); and rule, procedural, and method specification relevant to task execution (*Specification of Procedures* KR-8 = .72, 5 items). It has been shown that these varieties of instrumental leadership are perceived distinctly by subordinates, and that they differentially relate to criteria (Bish & Schriesheim, Note 1; Schriesheim, Note 4). *Supportive leader behavior* is indicative of warmth, friendship, trust, and concern for the subordinate's personal welfare (KR-8 = .95, 11 items). These dimensions of leader behavior are discussed in House and Mitchell (1974) and House and Dessler (1974).

Table 7 displays the validity coefficients between subordinate role ambiguity and organizational commitment and selected leadership and substitutes for leadership variables. As may be seen, even in a police command bureaucracy, where the formal leader's role is traditionally afforded high significance, leader behaviors account for only a small portion of the criterion variance. Indeed, role clarification is the only leader behavior which exerts a significant independent effect upon the subordinate outcomes.

High organizational commitment tends to be associated with intrinsically satisfying tasks where performance feedback is readily available as much as with leader role clarification. Similarly, the independent contributions of task and organizational variables (organizational formalization, task routinization, intrinsically satisfying tasks) toward explaining role ambiguity are not overshadowed by the leadership predictors. Again only leader role clarification provides a statistically significant, independent contribution among the leader behaviors.

As shown in the reduced models, parsimonious predictor sets may be selected which account for meaningful portions of criterion variance. When powerful leader substitutes such as intrinsically satisfying work and task-provided performance feedback exist, the leader's supportive behaviors fail to contribute significantly in predicting organizational commitment. The function of leader work assignment and specification of procedures in reducing role ambiguity may be seen to be superfluous given the importance of organizational structure and task variables, though no important substitutes for leader role clarification were found.
TABLE 7
MULTIPLE REGRESSION EQUATIONS: ORGANIZATIONAL COMMITMENT AND ROLE AMBIGUITY REGRESSED UPON LEADER BEHAVIORS AND LEADERSHIP SUBSTITUTES

(City police n = 113)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Full model</th>
<th>Reduced model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>simple r</td>
<td>Beta weight</td>
</tr>
<tr>
<td>AETK</td>
<td>.20*</td>
<td>.08</td>
</tr>
<tr>
<td>PROF</td>
<td>.09</td>
<td>-.03</td>
</tr>
<tr>
<td>ROUTIN</td>
<td>.10</td>
<td>.13</td>
</tr>
<tr>
<td>TSKFB</td>
<td>.32**</td>
<td>.15</td>
</tr>
<tr>
<td>INSAT</td>
<td>.56**</td>
<td>.46**</td>
</tr>
<tr>
<td>ORFORM</td>
<td>.22</td>
<td>.00</td>
</tr>
<tr>
<td>INFLEx</td>
<td>-.04</td>
<td>-.09</td>
</tr>
<tr>
<td>ADSTF</td>
<td>.20*</td>
<td>.12</td>
</tr>
<tr>
<td>CLOSE</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td>NINDEP</td>
<td>-.15</td>
<td>-.09</td>
</tr>
<tr>
<td>ILBROLCL</td>
<td>.39**</td>
<td>.22*</td>
</tr>
<tr>
<td>ILBWA</td>
<td>.06</td>
<td>-.03</td>
</tr>
<tr>
<td>ILBSPEC</td>
<td>-.03</td>
<td>-.01</td>
</tr>
<tr>
<td>SUPPORT</td>
<td>.21*</td>
<td>-.07</td>
</tr>
</tbody>
</table>

**R = .66**.  
**R = .63**.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Role ambiguity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>simple r</td>
</tr>
<tr>
<td>AETK</td>
<td>-.07</td>
</tr>
<tr>
<td>PROF</td>
<td>-.06</td>
</tr>
<tr>
<td>ROUTIN</td>
<td>-.40**</td>
</tr>
<tr>
<td>TSKFB</td>
<td>-.28**</td>
</tr>
<tr>
<td>INSAT</td>
<td>-.41**</td>
</tr>
<tr>
<td>ORFORM</td>
<td>-.53**</td>
</tr>
<tr>
<td>INFLEx</td>
<td>-.19</td>
</tr>
<tr>
<td>ADSTF</td>
<td>-.08</td>
</tr>
<tr>
<td>CLOSE</td>
<td>-.03</td>
</tr>
<tr>
<td>NINDEP</td>
<td>.11</td>
</tr>
<tr>
<td>ILBROLCL</td>
<td>-.55**</td>
</tr>
<tr>
<td>ILBWA</td>
<td>-.18</td>
</tr>
<tr>
<td>ILBSPEC</td>
<td>-.06</td>
</tr>
<tr>
<td>SUPPORT</td>
<td>-.24*</td>
</tr>
</tbody>
</table>

**R = .77**.  
(*p < .05   **p < .01).

**R = .75**.

This latter finding may be partially explained by recognizing that information about work goals, authority and responsibility, and job performance standards may be difficult to transmit except by personal modes, while work assignment and specification of procedures can readily be transmitted by central dispatching and standard operating procedures, respectively (see Bordua & Reiss, 1966).
ELABORATION OF THE CONSTRUCT

Table 1 was designed to capsizeulate our present knowledge with respect to possible substitutes for hierarchical leadership. Since present knowledge is the product of past research, and since past research was primarily unconcerned with the topic, the table is probably oversimplified and incomplete in a number of respects. Rigorous elaboration of the substitutes construct must necessarily await additional research, but we would speculate that such research would show the following refinements to be important.

Distinguishing between "substitutes" and "neutralizers." A "neutralizer" is defined by Webster's as something which is able to "paralyze, destroy, or counteract the effectiveness of" something else. In the context of leadership, this term may be applied to characteristics which make it effectively impossible for relationship and/or task-oriented leadership to make a difference. Neutralizers are a type of moderator variable when uncorrelated with both predictors and the criterion, and act as suppressor variables when correlated with predictors but not the criterion (Zedeck, 1971; Wherry, 1946).

A "substitute" is defined to be "a person or thing acting or used in place of another." In context, this term may be used to describe characteristics which render relationship and/or task-oriented leadership not only impossible but also unnecessary. Substitutes may be correlated with both predictors and the criterion, but tend to improve the validity coefficient when included in the predictor set. That is, they will not only tend to affect which leader behaviors (if any) are influential, but will also tend to impact upon the criterion variable.

The consequences of neutralizers and substitutes for previous research have probably been similar, since both act to reduce the impact of leader behaviors upon subordinate attitudes and performance. For this reason it is not too important that such summaries of previous research as Table 1 distinguish between them. Nevertheless, an important theoretical distinction does exist. It is that substitutes do, but neutralizers do not, provide a "person or thing acting or used in place of" the formal leader's negated influence. The effect of neutralizers is therefore to create an "influence vacuum," from which a variety of dysfunctions may emerge.

As an illustration of this point, look again at the characteristics outlined in Table 1. Since each characteristic has the capacity to counteract leader influence, all 14 may clearly be termed neutralizers. It is not clear, however, that all 14 are substitutes. For example, subordinates' perceived "ability, experience, training, and knowledge" tend to impair the leader's influence, but may or may not act as substitutes for leadership. It is

---

6 This potentially important distinction was first pointed out by M. A. Von Glinow in a doctoral seminar.
known that individuals who are high in task-related self-esteem place high value upon non-hierarchical control systems which are consistent with a belief in the competence of people (Korman, 1970). The problem is that subordinate perceptions concerning ability and knowledge may not be accurate. Actual ability and knowledge may therefore act as a substitute, while false perceptions of competence and unfounded self-esteem may produce simply a neutralizing effect.

"Spatial distance," "subordinate indifference toward organizational rewards," and "organizational rewards not within the leader's control" are other examples of characteristics which do not render formal leadership unnecessary, but merely create circumstances in which effective leadership may be impossible. If rewards are clearly within the control of some other person this other person can probably act as a substitute for the formal leader, and no adverse consequences (except probably to the leader's morale) need result. When no one knows where control over rewards lies, however, or when rewards are linked rigidly to seniority or to other factors beyond anyone's control, or when rewards are perceived to be unattractive altogether, the resulting influence vacuum would almost inevitably be dysfunctional.

Distinguishing between direct and indirect leader behavior effects. It is possible to conceptualize a direct effect of leadership as one which occurs when a subordinate is influenced by some leader behavior in and of itself. An indirect effect may be said to result when the subordinate is influenced by the implications of the behavior for some future consequence. Attempts by the leader to influence subordinates must always produce direct and/or indirect effects or, when strong substitutes for leadership exist, no effect.

This distinction between direct and indirect effects of leader behavior has received very little attention, but its importance to any discussion of leadership substitutes is considerable. For example, in their review of Path-Goal theory, House and Dessler (1974, p. 31) state that "subordinates with high needs for affiliation and social approval would see friendly, considerate leader behavior as an immediate source of satisfaction" (direct effect). As Table 1 suggests, it is conceivable that fellow group members could supply such subordinates with enough affiliation and social approval to eliminate dependence on the leader. With other subordinates, however, the key "may be not so much in terms of what the leader does but may be in terms of how it is interpreted by his members" (Graen et al., 1972, p. 235). Graen et al. concluded from their data that "consideration is interpreted as the leader's evaluation of the member's role behavior..." (p. 233). For these subordinates, therefore, consideration seems to have been influential primarily because of its perceived implications for the likelihood of receiving future rewards. In this case the
effect is an indirect one, for which group member approval and affiliation probably cannot substitute.

In the same vein, we are told by House and Dessler (1974, pp. 31–32) that:

Subordinates with high needs for achievement would be predicted to view leader behavior that clarifies path-goal relationships and provides goal oriented feedback as satisfying. Subordinates with high needs for extrinsic rewards would be predicted to see leader directiveness or coaching behavior as instrumental to their satisfaction if such behavior helped them perform in such a manner as to gain recognition, promotion, security, or pay increases.

It is apparent from House and Dessler’s remarks that the distinction between direct and indirect effects need not be limited to relationship-oriented behaviors. Such characteristics of the task as the fact that it “provides its own feedback” (listed in Table 1 as a potential substitute for task-oriented behavior) may provide achievement-oriented subordinates with immediate satisfaction (direct effect), but fail to negate the superior’s ability to help subordinates perform so as to obtain future rewards (indirect effect). Conversely, subordinate experience and training may act as substitutes for the indirect effects of task-oriented leadership, by preventing the leader from improving subordinate performance, but may not offset the direct effects.

Identifying other characteristics and other leader behaviors. Any elaboration of the substitutes construct must necessarily include the specification of other leader behaviors, and other characteristics which may act as substitutes for leader behaviors. As was mentioned earlier, most previous studies of leadership were concerned with only two of its dimensions. This approach is intuitively indefensible. Richer conceptualizations of the leadership process already exist, and almost inevitably underscore the importance of additional leader activities. As these activities are delineated in future research, it is likely that substitutes for them will also be identified.

Table 8 is offered as a guide to research. It portrays a state of increased sophistication of the substitutes construct, assuming future development along lines suggested in this section. Substitutes would be differentiated from neutralizers, and direct effects of leadership empirically distinguished from indirect effects. The columns on the right are intended to represent as-yet-unexplored leader behaviors, and the dotted lines on the bottom indicate the presence of additional characteristics which may act either as neutralizers, or as true substitutes for leadership.

Distinguishing between cause and effect in leader behavior. Another area where the substitutes construct appears to have implications for leadership research concerns the question of causality. It is now evident from a variety of laboratory experiments and longitudinal field studies
### TABLE 8
**Substitutes for Leadership: A Theoretical Extension**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Will Act as a substitute for Relationship-Oriented Supportive, People-Centered Leadership (Consideration, Support, and Interaction Facilitation):</th>
<th>Will Act as a substitute for Task-Oriented, Instrumental, Job-Centered Leadership (Initiating Structure, Goal Emphasis, and Work Facilitation):</th>
<th>(Other leader behaviors . . .)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Directly</td>
<td>Indirectly</td>
<td>Directly</td>
</tr>
<tr>
<td><strong>Substitutes</strong></td>
<td><strong>of the subordinate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. ability</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3. &quot;professional&quot; orientation of the task</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5. unambiguous and routine</td>
<td>X</td>
<td>X</td>
<td>?</td>
</tr>
<tr>
<td>7. provides its own feedback concerning accomplishment</td>
<td>X</td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>8. intrinsically satisfying of the organization</td>
<td>X</td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>12. closely-knit, cohesive work groups</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Neutralizers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. indifference toward organizational rewards</td>
<td>X</td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>13. organizational rewards not within the leader's control</td>
<td>X</td>
<td></td>
<td>?</td>
</tr>
</tbody>
</table>

---

*TABLE 8 elaborates on the concept of substitutes for leadership by delineating characteristics that can act as direct or indirect substitutes for both relationship-oriented and task-oriented leadership styles. The table highlights how certain characteristics, such as the ability of the subordinate or the nature of the task, can indirectly support different leadership styles. The neutralizers, on the other hand, indicate conditions under which leadership efficacy may decrease. This table is instrumental in understanding the dynamics of leadership substitution in various organizational contexts.*
that leader behavior may result from as well as cause subordinate attitudes and performance. It is possible to speculate upon the effect that leadership substitutes would have on the relative causal strength of superior- and subordinate-related variables. This paper has tried to show that such substitutes act to reduce changes in subordinates' attitudes and performance which are caused by leader behaviors. On the other hand, there seems no reason why leadership substitutes should prevent changes in leader behavior which result from different levels of subordinate performance, satisfaction, and morale. The substitutes for leadership construct may therefore help to explain why the direction of causality is sometimes predominantly from leader behavior to subordinate outcomes, while at other times the reverse is true.

Specification of interaction effects among substitutes and neutralizers. From the limited data obtained thus far, it is not possible to differentiate at all among leadership substitutes and neutralizers in terms of relative strength and predictive capability. We have received some indication that the strength of a substitute, as measured by its mean level, is not strongly related to its predictive power. Substitutes for leadership as theoretically important as intrinsic satisfaction, for example, apparently need only be present in moderate amounts (as is the case with the City Police; see Table 6) to have potent substituting effects (see Table 7). Other, less important substitutes and neutralizers, might have to be present to a tremendous degree before their effects might be felt. Clearly, the data reported in this study are insufficient to determine at what point a particular substitute becomes important, or at what point several substitutes, each fairly weak by itself, might combine to collectively impair hierarchical leader influence. Multiplicative functions involving information on the strength and predictive power of substitutes for leadership should be able to be specified as evidence accumulates.

CONCLUSIONS

The research literature provides abundant evidence that for organization members to maximize organizational and personal outcomes, they must be able to obtain both guidance and good feelings from their work settings. Guidance is usually offered in the form of role or task structuring, while good feelings may stem from "stroking" behaviors,\(^7\) or may be derived from intrinsic satisfaction associated with the task itself.

The research literature does not suggest that guidance and good feelings must be provided by the hierarchical superior; it is only necessary that they somehow be provided. Certainly the formal leader represents a po-

\(^7\)"Stroking" is used here, as in transactional analysis, to describe "any type of physical, oral, or visual recognition of one person by another" (Huse, 1975, p. 288).
potential source of structuring and stroking behaviors, but many other organization members do too, and impersonal equivalents also exist. To the extent that other potential sources are deficient, the hierarchical superior is clearly in a position to play a dominant role. In these situations the opportunity for leader downward influence is great, and formal leadership ought to be important. To the extent that other sources provide structure and stroking in abundance, the hierarchical leader will have little chance to exert downward influence. In such cases it is of small value to gain entree to the organization, distribute leader behavior questionnaires to anything that moves, and later debate about which leadership theory best accounts for the pitifully small percentage of variance explained, while remaining uncurious about the large percentage unexplained.

Of course, few organizations would be expected to have leadership substitutes so strong as to totally overwhelm the leader, or so weak as to require subordinates to rely entirely on him. In most organizations it is likely that, as was true here, substitutes exist for some leader activities but not for others. Effective leadership might therefore be described as the ability to supply subordinates with needed guidance and good feelings which are not being supplied by other sources. From this viewpoint it is inaccurate to inform leaders (say, in management development programs) that they are incompetent if they do not personally provide these things regardless of the situation. While it may (or may not) be necessary that the organization as a whole function in a "9–9" manner (Blake & Mouton, 1964), it clearly is unnecessary for the manager to behave in such a manner unless no substitutes for leader-provided guidance and good feelings exist.

Dubin (1976, p. 33) draws a nice distinction between "proving" and "improving" a theory, and points out that "if the purpose is to prove the adequacy of the theoretical model . . . data are likely to be collected for values on only those units incorporated in the theoretical model. This usually means that, either experimentally or by discarding data, attention in the empirical research is focused solely upon values measured on units incorporated in the theory."

In Dubin's terms, if we are really interested in improving rather than proving our various theories and models of leadership, a logical first step is that we stop assuming what really needs to be demonstrated empirically. The criticality of the leader's role in supplying necessary structure and stroking should be evaluated in the broader organizational context. Data pertaining to both leadership and possible substitutes for leadership (Table 1) should be obtained, and both main and interaction effects examined. A somewhat different use of information about substitutes for leadership would be as a "prescreen," to assess the appropriateness of a potential sample for a hierarchical leadership study.
What this all adds up to is that, if we really want to know more about the sources and consequences of guidance and good feelings in organizations, we should be prepared to study these things whether or not they happen to be provided through hierarchical leadership. For those not so catholic, whose interest lies in the derivation and refinement of theories of formal leadership, a commitment should be made to the importance of developing and operationalizing a true situational theory of leadership, one which will explicitly limit its propositions and restrict its predictions to those situations where hierarchical leadership theoretically ought to make a difference.

REFERENCES


**REFERENCE NOTES**


Received: August 19, 1976