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Planning for Organizational Intervention: The Importance of Existing Socio-Psychological Situations in Organizational Diagnosis

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The appropriateness of organizational-change-and-development interventions is a function of (a) change-agent orientation, (b) existing organizational conditions, and (c) employees' perceived ideal organizational conditions. Research evidence on organizational change and development is used to support points "a" and "b." It is argued that perceived ideal organizational conditions are important to change agents because this information provides an indication of organizational members' preferences. Because the success of organization development depends on employee participation and acceptance, ascertaining the ideal should be of benefit in organizational diagnosis. Data obtained from two different samples indicate that perceptions of the ideal are related to perceptions of existing conditions. Arguments for using the ideal in conjunction with existing organizational conditions are made. In some instances this information may suggest coordinating different interventions within an overall OD program in order to achieve the desired objectives.

By definition, success in organizational change and development is contingent on selecting and effectively implementing an appropriate intervention. For analytical purposes, selection and implementation may be placed within the framework of an action-research model, i.e., the careful preparation of a scientific diagnosis, the determination of objectives to be accomplished, and, finally, program implementation and monitoring. Research on organizational change and development clearly suggests that several factors must be evaluated to determine the likelihood of an intervention's appropriateness: (a) change-agent orientation, (b) present organizational conditions such as organizational

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climate, and (c) the enterprise’s preferred or ideal organizational conditions, as perceived by its members.

Factors such as these are important because they cumulatively contribute to the effectiveness of a change program. In addition to having the expertise necessary to implement a specific change strategy, a change agent must feel comfortable with the intervention selected, and the existing organizational conditions must be amenable to improvement through the intervention selected. Knowing the nature of an enterprise’s perceived ideal organizational conditions gives a change agent an indication of what specific outcome work-group members desire so a change strategy can be selected.

Several recent studies are especially relevant to the present discussion. With respect to change-agent orientation, in a study of the value orientations of 152 change agents, Slocum (1978) reported finding a relationship between cognitive style, as conceptualized by Jung (1953), i.e., sensation thinker, intuitive thinker, intuitive feeler, and sensation feeler, and both the focus of the diagnostic information they sought, i.e., task, structure, and people, and the interventions they selected, e.g., T-group, survey feedback, etc. These results led Slocum to conclude that change agents with different cognitive styles do in fact use differing \textit{amounts} of various types of information during an OD diagnosis and probably employ different interventions to bring about change. For example, a change agent who was considered to be an intuitive thinker, i.e., one who was “more concerned with the intellectual and theoretical concepts of organizations in general than with efficiency” (Slocum, 1978, p. 203) was found to seek more diagnostic information on structure than on task and people. Similarly, survey feedback was found to be more likely to be employed by intuitive thinkers than by change agents classified into one of the other cognitive categories.

With respect to existing organizational conditions, Bowers and Hausser (1977) demonstrated that a variety of change interventions vary significantly in their ability to produce changes in organizational effectiveness criteria. Employing an innovative and industrious methodology, the researchers empirically evaluated the impact of five different interventions (survey feedback, interpersonal-process consultation, laboratory training, task-process consultation, and data handback) on the operational effectiveness of 358 civilian and 200 military work groups. Utilizing responses to the Survey of Organizations questionnaire (Taylor & Bowers, 1972) Bowers and Hausser were able to develop an organizational profile for each work group. The groups were then classified into seventeen larger profile patterns, and it was determined that one or more of the five interventions had been conducted within an organization representative of all but one of the seventeen profiles, thereby providing data on which to base a quantitative comparison of the relative effectiveness of each change intervention. Although Bowers and Hausser’s results do not allow an identification of
which intervention was most appropriate for a particular profile, they clearly indicate that certain interventions are relatively more effective than others when conducted in a particular profile.

Finally, the nature of the enterprise's ideal organizational conditions as perceived by its members is found in the willingness of an individual to accept change. By determining the differing perceptions of individuals, homogeneous groups can be formed and exposed to different interventions based on their perceptions, thus enhancing the probable success of a change program. This is not to imply that several distinct organizational styles necessarily will operate simultaneously within an organization, but that it may be preferable to base an OD program on the ideal perceptions of work-group members. For instance, it may be necessary initially to introduce a work group to laboratory training in order to explain certain basic concepts of managing and then to follow up with a form of survey feedback. Or it may be best for a group to forego laboratory training to be introduced immediately to survey feedback. Although the overall objectives for the program may be the same for all the groups, determining the ideal and grouping individuals accordingly may prevent the exposure of some to an intervention for which they may not be ready.

The basic rationale for this approach can be found in the early Harwood research as related by Likert (Conversation: An interview with Rensis Likert, 1973) and Marrow (1964). They attributed the failure of their intended interventions to introduce successful participative leadership into Harwood's Puerto Rico and Norway plants to the fact that subordinates in these plants regarded the experimentally introduced leader-behavior patterns as inappropriate and too drastic a change. Likert has argued since that in these instances the introduction of change should have been more gradual.

In conjunction with determining the ideal organizational conditions as perceived by work-group members, it also may be helpful to identify and analyze any relevant variables associated with differing employee perceptions. This would not only contribute to our understanding of why perceptions of the ideal differ, but also provide some insight into the degree of control a change agent may exercise in bringing about change. For example, if a change agent determines that sex is associated with perceptions of ideal organizational conditions, he or she may be able to facilitate change by altering the sexual composition of a work group. At least two methodologies have been employed using this approach. Mitroff and Kilmann (1975) had individuals write essays or stories about their perceived ideal organizations, then administered a questionnaire that ascertained the personality types of the respondents. They found that there was a relationship between the cognitive styles of respondents and their descriptions of ideal organizations.

A second methodology for ascertaining perceived ideal organizational conditions has been employed recently in leader-behavior re-
search. Typically, questionnaires are administered that measure various dimensions of ideal leader behavior. The responses are then grouped according to various demographic or organizational variables. Such analyses generally suggest that certain types of individuals prefer particular leader behaviors and that organizational effectiveness may be improved by forming homogeneous groups and assigning leaders to these groups based on their perceptions of ideal leader behavior. From an OD perspective, an additional implication is that it may be beneficial to cluster individuals into homogeneous groups and to expose them selectively to different interventions rather than employing an organization-wide change-and-development program.

Several investigations (Butterfield & Bartol, 1977; Hunt & Liebscher, 1973; Kavanagh, 1975; Stogdill & Coady, 1970) have been undertaken on the relationship between selected demographic (e.g., sex or organizational level) and organizational variables (e.g., method of assigning supervisors to work groups). This research, however, offers only limited direction for addressing the issue of ideal leader behavior, perhaps because the research has focused primarily on inappropriate contingent variables. For instance, Vicars (1977) questioned the wide use in leadership studies of easily accessible gross variables such as occupational level and sex. He argued that the use of such variables appreciably increases the danger of "covering up true variance in underlying processes" (p. 208) and suggested using variables "like role socialization that actually mediate [leader-subordinate] relationships" (p. 210). One such role-socialization variable that has not been investigated is the state of present leader behavior as perceived by members of a work group. Following Vicars, it may be argued that perceptions of ideal leader behavior are a function of present leader behavior, in that people experiencing one type of leadership situation may become socialized to such an extent that they have different perceptions of ideal leader behavior than individuals experiencing another type of leadership situation.

In line with the earlier discussion, the implication is that leadership is a behavior that can be improved by a variety of intervention techniques, ranging from simple conventional training programs to more complex organization development programs. There is a need to broaden the meaning of leadership to include the influence of both leaders and work-group members. This is consistent with the leadership research of Bowers and Seashore (1966), who propose that leadership:

may be provided by anyone in a work group for anyone else in that work group. In this sense leadership may be either "supervisory" or "mutual"; that is, a group's needs for support may be provided by a formally designated leader, by members for each other, or both; goals may be emphasized by the formal leader by members to each other, or both. (p. 249)

In sum, Bowers and Seashore argue that the behavior of a formal leader is a contributing factor in setting the pattern for the mutual leadership
that subordinates (peers) provide for each other. It may be further posited that one’s perception of ideal supervisory and peer leader behavior may be affected by the existing supervisory and peer leader behavior patterns.

The purpose of the present research was to determine whether or not diagnostic information concerning existing socio-psychological variables can be effectively utilized in planning and implementing a change program.

**METHOD**

**Questionnaire**

The Survey of Organizations (SOO) questionnaire (Taylor & Bowers, 1972) was used in the data collection. The SOO consists of 130 items intended to measure four broad organizational dimensions: (1) leadership, (2) organizational climate, (3) satisfaction, and (4) group process. Respondents’ perceptions are scored in most instances using a Likert-type scale. Subjects indicate their perceptions of a specific organizational dimension as it exists now. On the leadership dimension, commonly referred to as the Michigan Four Factor Scales (Bowers & Seashore, 1966), respondents also indicate their perceptions of this dimension as they would like it to exist. For the purposes of the present study, only the twenty-one items comprising the leadership dimension were analyzed.

**Subjects**

Data were collected from two different samples. One consisted of nurses employed at an 1100-bed Veterans Administration Hospital divided into six services and twenty-four wards. This sample was comprised of 202 respondents (57 percent female) at five levels in the hospital’s nursing service, each differing in formally prescribed authority, responsibilities, and rewards.

The second sample consisted of 222 military trainers of an Advanced Individual Training Brigade stationed at a major U.S. army base. The trainers’ responsibilities were (a) to assist in establishing training objectives, (b) to assist in designing and developing the training program and training aids, and (c) to conduct the actual training.

**Statistical Procedures**

Schriesheim and Kerr (1977) have synthesized a substantial amount of evidence about the psychometric properties of the most frequently used instruments to measure leader behavior: the Ohio State Leadership Scales (LBDQ), the University of Michigan Four-Factor Scales, and the Least Preferred Co-Worker Scale. They evalu-
ated each of these measures on five criteria: (1) content validity, (2) construct validity, (3) internal consistency, (4) score stability, and (5) response properties, and concluded that none of the "scales were sufficiently reliable and valid to warrant their continued uncritical usage in leadership research" (p. 32). For this reason, particular care was taken when investigating the psychometric properties of the leadership scales used in the present samples. Thus, even though the leadership dimension of the SOO is purportedly comprised of the four factors of support, interaction facilitation, goal emphasis, and work facilitation (Taylor & Bowers, 1972), the responses to the items comprising the leadership dimension were subjected to an independent factor analysis. The twenty-one now-scale items and the twenty-one companion ideal-scale items were factor analyzed separately using the Biomed package (Dixon, 1975). The method selected (and recommended by Kaiser [1970]), commonly referred to as the "second-generation-little-jiffy," consists of image analysis followed by orthoblique rotation. In addition, Biomed provides Kaiser's measure of sampling adequacy (MSA) (Cerny & Kaiser, 1977; Kaiser, 1970), a quantitative value ranging in magnitude from minus infinity to a plus one that provides a basis on which to evaluate the adequacy of the data used in the factor analysis. Kaiser asserted that to be considered "good" the MSA should be in the .80s and to be excellent it must be in the .90s (Kaiser, 1970, p. 405).

The results of the factor analysis of the twenty-one now-scale items for the hospital sample revealed two clearly distinguishable factors. One factor (comprised of ten items) was labeled NOW supervisory leadership (NSL) and the other (comprised of eleven items) NOW peer leadership (NPL). The MSA for this factor analysis was .94.

The factor analysis of the twenty-one now-scale items for the military sample also produced two clearly distinguishable factors, also labeled NOW supervisory leadership (NSL) and NOW peer leadership (NPL). The MSA was .93.

The mean responses for the NSL and NPL factors within each sample were then arrayed and divided in half. The lower portion contained those individuals whose perceptions indicated that the behaviors NSL and NPL were practiced to a lesser extent. The upper portion contained those who indicated that the leader behaviors NSL and NPL were practiced to a greater extent. Each sample was then divided into four groups: (1) lesser extent NSL (LENSL), (2) greater extent NSL (GENSL), (3) lesser extent NPL (LENPL), (4) greater extent NPL (GENPL).

The twenty-one ideal-scale items for each of the subgroups within each sample were subjected to a second-generation-little-jiffy factor analysis. Two factors were extracted for each subgroup. For example, the responses to the ideal-scale items for persons from the hospital sample who were classified in the subgroup LENS were factor
Ideal Supervisor Behavior (IDSUP)

How friendly and easy to approach is your supervisor?
To what extent does your supervisor offer new ideas for solving job-related problems?
To what extent does your supervisor encourage the persons who work for him/her to work as a team?
To what extent does your supervisor encourage people who work for him/her to exchange opinions and ideas?
To what extent is your supervisor willing to listen to your problems?
How much does your supervisor encourage people to give their best effort?
To what extent does your supervisor maintain high standards of performance?

Ideal Peer Behavior (IDPEER)

To what extent are persons in your work group willing to listen to your problems?
How much do persons in your work group encourage each other to give their best effort?
How much do persons in your work group encourage each other to work as a team?
How much do persons in your group emphasize a team goal?

Figure 1. Items Used To Form IDSUP and IDPEER Composite Variables

analyzed. The data for each subgroup were manipulated accordingly. The MSAs for the four subgroups ranged from a low of .84 to a high of .94, well within Kaiser’s (1970) good-to-excellent range.

In addition, each factor solution was closely scrutinized to ensure its meaningfulness, and items were eliminated from the solutions if it was obvious that they were loaded heavily on both factors. Most items loaded high on a single factor. It was not uncommon for the eleven items loading on one factor to have a minimal value of about .6. Using this procedure, the factor structures were “trimmed” (a total of ten items were omitted) and composite variables were formed labeled Ideal Supervisor Behavior (IDSUP) and Ideal Peer Behavior (IDPEER). The items comprising each composite variable are contained in Figure 1.

RESULTS

Group $t$-tests were computed on the mean NSL and NPL scores of each subgroup within each sample to verify the statistical independence of the subgroups. The differences between the LENSL and GENSL and the LENPL and GENPL subgroups were found to be significantly different in all cases (Tables 1 and 2). These findings
indicated that perceived leader behavior between the paired subgroups within each sample was different.

Group *t*-tests were also computed on the mean *ideal* leader behavior between those individuals within each sample in the lesser-extent subgroup and those in the greater-extent subgroup so that tests of significance were computed on the mean *ideal* leader behavior, i.e., IDSUP and IDPEER as perceived by those individuals in the LENSL subgroup and those in the GENSL subgroup (see Tables 1 and 2). These computations show that for the military and the hospital sample the mean perceptions of ideal supervisory leadership for the LENSL subgroup are significantly less extreme than the mean perceptions of the ideal supervisory leadership for the GENSL subgroup (see Table 1). Therefore, it seems that individuals in the LENSL subgroup have significantly less ideal perceptions of supervisory leader behavior than individuals in the GENSL subgroup.

Table 2 shows the results of computations to determine the relationship between perceptions of existing peer leader behavior and perceptions of ideal peer leader behavior. For the military sample, the mean perceptions of ideal peer leadership for the LENPL subgroup are significantly less ideal than the mean perceptions of ideal peer leadership for the GENPL subgroup. Therefore, for the military sample, the existing peer leadership situation seems to be related to perceptions of the ideal peer leadership situation. The results of the test for the hospital sample do not support such a conclusion, although the difference between the two subgroups is in the hypothesized direction.

**DISCUSSION**

An underlying thesis of this research was that a person's perception of ideal leader behavior is based on existing leader behavior. Although no attempt was made to determine the *causes* of leader behavior, there is sufficient research to support the belief that leader behavior.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Subgroup</th>
<th>n</th>
<th>Mean NSL</th>
<th>t</th>
<th>Mean IDSUP</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military</td>
<td>LENS L</td>
<td>111</td>
<td>3.06</td>
<td>-19.65*</td>
<td>4.04</td>
<td>-5.98**</td>
</tr>
<tr>
<td></td>
<td>GENSL</td>
<td>111</td>
<td>4.73</td>
<td></td>
<td>4.79</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LENS L</td>
<td>105</td>
<td>2.51</td>
<td></td>
<td>4.08</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>GENSL</td>
<td>101</td>
<td>4.26</td>
<td>-25.35*</td>
<td>4.33</td>
<td>-1.80*</td>
</tr>
</tbody>
</table>

*p < .001, one tail
**p < .05, one tail
behavior is influenced by a number of sociological factors, e.g., superior and subordinate behavior (Crowe, Bochner, & Clark, 1972; Salancik, Calder, Rowland, Leblebici, & Conway, 1975) and organizational policies (Stanton, 1960). These factors may be classified, in a broad sense, as socialization stimuli. This may be the case in the present research. Regardless of a person’s preference prior to becoming a member of an organization, he or she will be exposed to certain socialization stimuli on the job that may eventually socialize him or her to perceive some other form of leader behavior as being ideal.

The implications of this sociological phenomenon are meaningful from the standpoint of both organizational diagnosis and change. If the objective of a change program is to create a more participative leadership climate, then those involved should be aware that subordinates within a unit that is perceived as having less participative leader behavior may have different perceptions of ideal leader behavior than do subordinates in a unit that is perceived as having more participative leader behavior. This point was specifically addressed by Likert when discussing the concept of congruency of leader behavior and subordinate preferences for leadership style (Conversation, 1973; Reilly, 1978). Likert (1967) has consistently argued that the participative form of management produces high unit effectiveness and that organizations that are anything less than participative can improve their effectiveness by moving toward a more participative form of management. He warned, however, that change agents must be careful to implement such changes very gradually (Conversation, 1973):

The fact is that we can take a System 2 organization and progressively move it from System 2 to System 2 1/2, to System 3 and eventually to System 4 and consistently get improvement as we move. This means that you start out at the beginning with a leader who behaves in an authoritarian System 2 manner in dealing with the rank and file because this is what they’re adjusted to and what they expect. You get better results with a System 2 manager supervising System 2 people than with a System 4 manager managing System 2 people. But progressively, you can move that System 2

Table 2. Mean NPL, Mean IDPEER, and t Values Between Subgroups for Military and Hospital Samples

<table>
<thead>
<tr>
<th>Sample</th>
<th>Subgroup</th>
<th>n</th>
<th>Mean NPL</th>
<th>t</th>
<th>Mean IDPEER</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military</td>
<td>LENPL</td>
<td>100</td>
<td>2.86</td>
<td></td>
<td>3.81</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GENPL</td>
<td>119</td>
<td>4.58</td>
<td>-21.42*</td>
<td>4.86</td>
<td>-8.71**</td>
</tr>
<tr>
<td></td>
<td>LENPL</td>
<td>100</td>
<td>2.51</td>
<td></td>
<td>4.07</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>GENPL</td>
<td>100</td>
<td>3.91</td>
<td>-18.91*</td>
<td>4.21</td>
<td>-.86</td>
</tr>
</tbody>
</table>

* p < .001, one tail
**p < .05, one tail
organization. The leadership, of course, moves ahead of the followership, toward System 4. (p. 37)

Following Likert's argument, a less participative group may need to "be brought along more slowly or differently" than a more participative group. Also, a different intervention may be more appropriate for less participative groups than for more participative groups. If this difference is not appreciated, then a negative reaction could result.

Harrison (1970) argued that interventions should be tailored to individual client organizations and conceptualized a continuum to demonstrate the depth of such interventions. The most shallow type of intervention depicted is very impersonal, e.g., operations analysis; the most depth is represented by intrapersonal analysis. Between the extremes of the continuum are MBO, Grid OD, and T-groups.

Subordinates and superiors in the LENS/L and LENPL groups do seem to require a different intervention strategy than the GENSL and the GEPL groups. At the very least, a change agent may prefer to conduct several laboratory sessions on managing consistent with the System 4 philosophy for the "lesser groups," while exposing the "greater groups" to a minimum amount of System 4 philosophy. Subsequently, it may be possible to introduce all groups to other interventions in an undifferentiated manner.

The success of OD as a change strategy customarily is based on the belief that a shared approach facilitates acceptance by creating ego involvement in planned change. By giving their perceptions of ideal organizational conditions, individuals communicate what they think the ideal organization should "look like." If there are significant differences among individuals about what the ideal "should be," then some resistance to a change program could develop. In short, planned change should be introduced very carefully, and in some situations it may require a phasing of interventions. Such an approach will obviously take longer to implement, but it is predicted that the acceptance of change will be more pronounced and will carry a greater potential long-run impact.

REFERENCES


Armenakis, Bedeian, & Niebuhr
Achilles A. Armenakis is associate professor and director of the Auburn Technical Assistance Center (a program partially funded by the Economic Development Administration) at Auburn University, Auburn, Alabama. In addition to his primary research interest in organizational change and development, he has published works on such topics as research methodology, organizational legitimacy, and role strain.

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Robert E. Niebuhr is an assistant professor in the Department of Management at Auburn University. He received his Ph.D. in organizational behavior from Ohio State University in 1977. His primary research interests are in the study of small-group leadership and the impact of individual differences on performance.