

# 3

## *Assessing Individual and Group Behavior*

In this chapter, a system model is provided to guide the assessment of individual and group behaviors and their impact on organizational effectiveness. Individual, group, and organizational forces shaping behavior are considered. Human resource management programs, which are designed to shape organizational behavior, are among the organizational forces examined. Then, a model is presented that focuses on conditions influencing critical group processes and performance outcomes. Techniques for gathering, analyzing, and feeding back data are also discussed. Special attention is given to the use of standardized questionnaires.

Why do some service teams earn praise from clients, while others get nothing but complaints?

We are losing top staff people, but the less promising ones stay on.

Our weekly program review meetings have deteriorated to the point where we argue repeatedly about the same issues and never get anywhere.

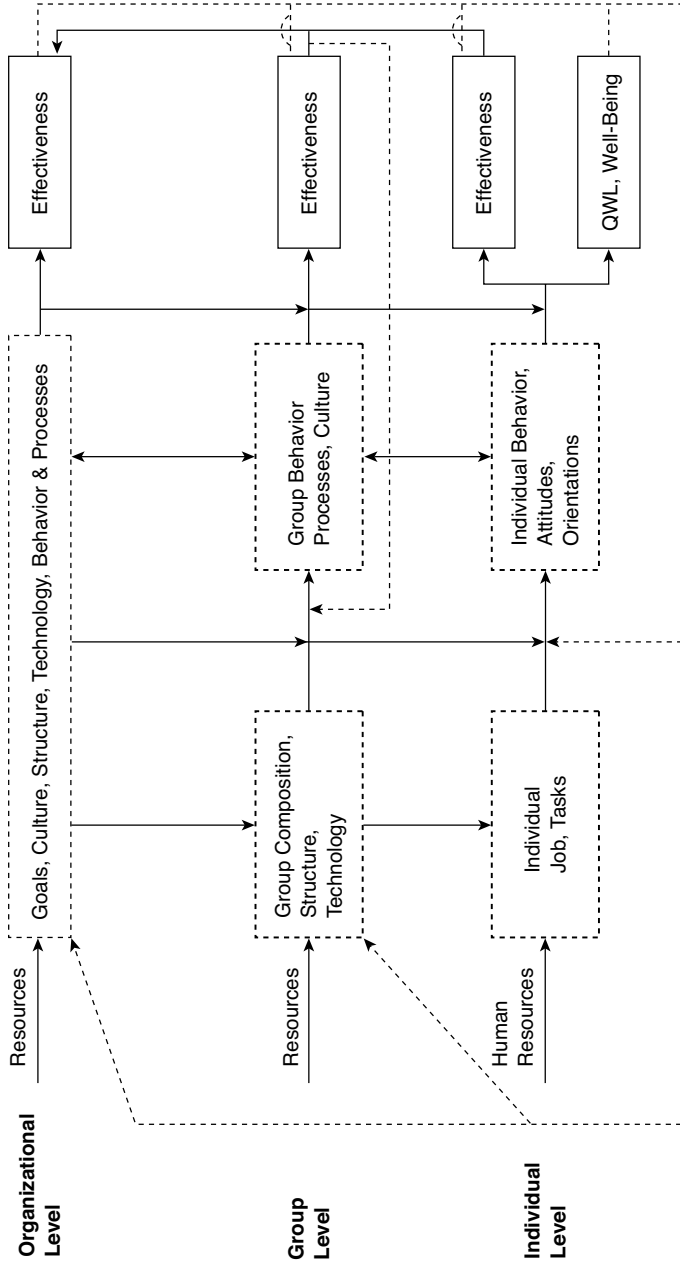
We need to know whether our staff development programs are producing managers who can lead our firm's expansion into the global marketplace.

The first three of these statements illustrate typical problems and challenges that clients present to behavioral science consultants. All three concern the possible effects of individual or group (team) behavior on organizational effectiveness.<sup>1</sup> The fourth statement asks for an assessment of whether a human resource management program is building staff skills.

### **MODEL FOR DIAGNOSING INDIVIDUAL AND GROUP BEHAVIOR**

Many forces in and around organizations shape patterns of organizational behavior such as those illustrated in the previous statements. Figure 3.1

# ENVIRONMENT



**Figure 3.1** Model for Diagnosing Individual and Group Behavior

Key: Solid lines show main lines of influence. Broken lines show feedback loops.

summarizes a guiding system model of the important forces and outcomes to examine in diagnosis.<sup>2</sup> A broad diagnosis would encompass the whole range of factors shown in the figure. A focused diagnosis would consider the subsets that were found to be important during entry and that closely reflected client concerns. The arrow in Figure 3.1 for human resource inputs refers to characteristics and traits that employees acquired in the past. The two boxes in the center of the bottom row depict the main forms of organizational behavior that shape group and individual outcomes. The outcomes shown in the figure include organizational, group, and individual effectiveness, along with quality of work life (QWL) and well-being. QWL refers to the degree to which work contributes to employees' material and psychological well-being (Nadler & Lawler, 1983; Walton, 1975). For simplicity, the model does not distinguish between divisional and organization-level phenomena, but this distinction may be important if divisions differ substantially from one another.

### Effectiveness

The critical aspects of individual and group effectiveness for diagnosis depend on the primary problems and challenges facing the groups and their main tasks, goals, and standards. Despite their limitations, output criteria are understandably popular. To assess group effectiveness in terms of outputs, consultants need to define the most important goods or services produced by the group and measure their output quality and quantity over a given time period. For instance, to assess quantitative outputs among units within state employment security offices, one researcher (Gresov, 1989, p. 441) counted claims processed by intake and processing units, job seekers placed by placement units, and people counseled by employment counseling units. The outputs for administrative and professional teams with complex tasks are often difficult to measure. They include solutions to problems (e.g., how to increase market share), plans (e.g., plans for AIDS education in the schools), tactics, and procedures for coordinating the work of other units.

Individual effectiveness includes the degree and quality of members' efforts, their level of initiative, cooperation with other employees, absenteeism, lateness, and commitment to the job. QWL and well-being are often defined in terms of employees' levels of satisfaction with the following conditions:

- Job security
- Fairness and adequacy of pay
- Working conditions
- Interpersonal relations
- Meaningfulness and challenge of work

Investigators can obtain descriptions of working conditions from employees or rate QWL and other working conditions on the basis of observation or the judgments of experts. Diagnosis can also use objective and subjective indicators of individual health and well-being, including rates of job-related illness, accidents, substance abuse on or off the job, stress, and burnout (Cook, Hepworth, & Wair, 1981, pp. 98–112; Cooper, 1998; Danna & Griffin, 1999; Maslach, Schaufeli, & Leiter, 2001; Shirom, 2003). Satisfaction with rewards may be valued for its own sake or because job satisfaction often reduces both desire for withdrawal from the job and turnover (Fisher & Locke, 1992). Under certain conditions, improvements in QWL and employee well-being can also lead to cost savings and higher productivity (Katz, Kochan, & Weber, 1985; Walton, 1975).

### **Factors Affecting Individual and Group Effectiveness**

Many individual-level factors affect individual and group effectiveness (see Figure 3.1). These include member characteristics such as education and training, the design of jobs, employee motivations, and attitudes to specific organizational actions and issues (e.g., mergers and diversity training). The impact of such individual factors can best be investigated directly because many factors intervene to shape how they influence group and individual outcomes. Such factors are most critical for organizational diagnosis when they are shared by sizable groups of employees. For example, the increase in educational levels among blue-collar workers throughout Europe and North America led workers to prefer more interesting and challenging work.

Despite the influence of such human resource inputs, practitioners and clients should not overestimate their importance. It is sometimes tempting to assume that the problems of a failing program or department could be solved if only the “right person” could be found to run it or the right staff members were chosen. When a unit’s problems seem likely to persist even if the “ideal” manager and staff are found, group and organizational sources of the problem also require investigation. Practitioners should also consider group and organizational factors when clients cannot readily alter individual factors and human resource inputs (e.g., when employees have civil service tenure).

By examining employees’ expectations and understandings of their work situation, consultants may discover explanations for suboptimal performance. If people expect their efforts to go unrewarded or to yield rewards that are not important to them (e.g., citation in the company newsletter), they will remain unmotivated to work toward improvement.

Diagnoses can also benefit from the assessment of specific attitudes and perceptions about questions being debated within an organization, such as a

merger or a new outsourcing policy. Consultants might, for example, ask employees how they feel about an outsourcing policy so as to assess the policy's impact on staff morale and turnover intentions. Repeated attitude surveys can also provide feedback on particular programs or groups. This information can contribute to assessment of progress toward a stated goal and can help managers spot problems before they become critical.

Group composition, structure, and technology can decisively shape individual, group, and organizational outcomes. For example, teams that are more heterogeneous on factors such as social background, education, and occupation are often more creative than more homogeneous groups but can also be less cohesive and less satisfying to participants (Milliken & Martins, 1996). Diagnostic studies often trace ineffective behavior to structural and technological factors at the group and organizational levels. For example, a diagnosis might reveal that the reward system encourages one type of behavior, such as individual productivity, while top management continues to hope for some other kind of outcome, such as enhanced teamwork (Kerr, 1995). Diagnoses can also uncover failures to measure critical outcomes. For instance, if long-haul freight crews are evaluated on down time and damage levels of delivered freight, they may learn to improve their ratings by cutting down on time-consuming safety checks. Other potentially influential group factors to consider include communication processes, cooperation and conflict, decision making, supervisory behavior, and group norms and beliefs. Research has shown much variation in the impacts of factors such as these on individual and group performance (Guzzo & Dickson, 1996).

Diagnostic studies can profitably explore the effects on individual and group effectiveness of a broad range of organizational factors. These include strategies, standards, and goals, which help shape the targets that managers use to evaluate performance. Attention is also warranted to the ways that organizational technologies and structures shape coordination and control within groups, the division of labor within and between groups, and the content of team and individual tasks.

Organizational culture is another factor that can affect performance. Culture shapes the beliefs and assumptions that focus people's attention and channel their effort (Ashkenasy, Wilderom, & Peterson, 2000; Trice & Beyer, 1993). Chief among these are beliefs about the way work gets done, how change occurs, who is powerful, what clients and customers expect, and how external trends and developments affect the organization. For example, in high-reliability organizations (Weick & Sutcliffe, 2001), members avoid potentially disastrous accidents and mistakes through intense awareness of possible causes of mistakes and consistent efforts to eliminate error-prone behavior.

### Human Resource Management Programs

In addition to the broad organizational factors previously discussed, diagnosis can examine human resource management (HRM) activities. These are programs and actions that are intended to shape the skills, knowledge, attitudes, and behavior of employees. A broad assessment of HRM impacts would encompass major HRM activities, including the following:

- External staffing (recruitment and selection)
- Internal staffing (placement, promotion, discharge, and retirement)
- Compensation (pay and benefits)
- Labor relations (contract negotiation and administration, grievances, and employee rights)
- Work environment (job design and occupational health and safety)

The following supporting HRM operations may also be investigated:

- Goal setting
- Planning (linking HRM to organizational strategy and goals; forecasting trends and planning actions)
- Job analysis (skill requirements, rewards, and motivational potential)
- Evaluation and performance assessment

More problem-oriented and focused diagnoses could treat one or more of these HRM areas as the main object for investigation (Harrison & Shirom, 1999, pp. 209-234). Case 6, for instance, presents an illustration of how a consultant might diagnose management training and development programs within a firm moving toward transnational operations—a complex, decentralized set of operations in many countries with many strategic alliances to local firms.<sup>3</sup>

### Case 6

To start, the practitioner defines the skills needed for managing a truly transnational firm. Among these skills is the ability to interact simultaneously with people from many cultures, learn from them, and treat them as equals. The practitioner then examines whether training programs, on-the-job experiences, and career development among the firm's managers are likely to foster these skills. To assess the impacts of training programs, the practitioner checks whether curriculum and instructional techniques are designed to promote the needed skills. If so, the practitioner directly measures training outcomes to see whether these formal objectives are achieved in practice. Recommendations focus on closing the gap between current and desired

practices to enhance skill development. Management might, for example, increase multinational participation in training programs and treat international experience and cultural adaptability as important criteria for career development and promotion.

### ACTION MODEL FOR GROUP TASK PERFORMANCE

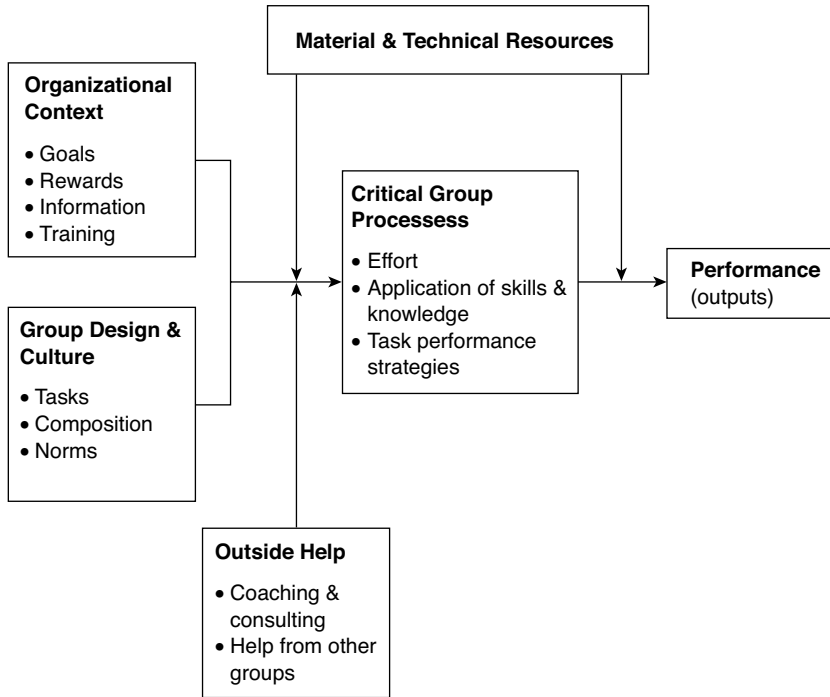
To simplify diagnosis and intervention, Hackman and colleagues (Hackman, 1987, 1991) developed the Action Model for Group Task Performance. Instead of encompassing the entire range of factors in Figure 3.1, the model focuses on organizational and group conditions that can serve as change levers for improving the task performance of work groups.<sup>4</sup> These conditions can serve well both as focal points for diagnosis and as building blocks in the design of new work groups.

At the center of the model, which is depicted in Figure 3.2, lie the following three critical group processes that pose the major hurdles to effective group performance:

1. Exertion of enough joint effort to accomplish tasks at acceptable levels of performance
2. Bringing adequate skills and knowledge to bear on the work
3. Using task performance strategies that fit the work and the cultural and organizational setting in which the work is done

Assessment of how well groups handle these critical processes can provide valuable diagnostic information about the groups' capacity for meeting effectiveness targets. However, interventions that target conditions that facilitate critical group processes are more likely to enhance group performance than efforts to directly change group processes.

As Figure 3.2 shows, there are four sets of potentially facilitating conditions. Each identifies likely causes of ineffective group processes and outcomes and provides potential levers for intervention to improve group functioning and task performance (see also Hackman, 2002). First are conditions relating to the *organizational context* within which the group operates. Higher management can promote performance by defining goals for group performance that are challenging and specific. Performance is enhanced when management delegates to the team much authority for deciding how to attain these goals. Organizational *reward systems* promote performance by focusing on group actions and outcomes, rather than individual performance, and recognizing and reinforcing good performance. The organization's *information system* can provide access to data and forecasts that help members



**Figure 3.2** Action Model for Group Task Performance

formulate their tasks and their performance strategies and provide feedback on performance. Informal and formal *training systems* contribute to performance by providing members with the necessary skills and knowledge in advance of task activity and in response to members' needs.

Second, *group design and culture* can facilitate or hinder group processes and performance. The most critical *task conditions* for groups include defining clear tasks, setting challenging objectives, assigning shared responsibility, and specifying accountability for task performance. In addition, it is important that groups be as small as possible because larger groups encounter more coordination problems. *Compositional features* that contribute to performance focus include clear boundaries; inclusion of members who possess the needed skills and knowledge, including interpersonal skills; and creation of a good mix of members in terms of training and experience. This mix ensures cross-fertilization and creativity while avoiding insurmountable divergences of opinion and working styles. Finally, groups are more successful when they possess clear and strong *norms*



that regulate behavior and ensure coordinated action. It is also important that these norms encourage members to act proactively and learn from their experiences.

Investigators can develop diagnostic questions based on each of the previously discussed facilitants of group processes. For example, diagnosis can assess whether managers set clear, challenging tasks for group members or fall into the trap of telling them to do their best, without specifying challenging, operational objectives. Diagnosis can also examine group and individual accountability for tasks so as to be sure that critical tasks are not falling between the cracks (see the discussion of responsibility charting in Chapter 4, pp. 79–81).

The third set of facilitating conditions refers to access to *outside help*, such as *coaching and consulting* received by members. Like team leaders, external coaches and consultants can help members anticipate or resolve critical coordination problems and learn to collaborate effectively. Coaches can also help build commitment to the group and its task. Leaders and coaches facilitate performance when they help members decide how best to use participants' skills and knowledge, learn from one another, and learn from other groups. Leaders or coaches also help groups avoid performance strategies that are likely to fail and can help group members think creatively about new ways to handle their tasks.

Fourth, groups need access to appropriate *material and technical resources*. Without the needed equipment, funds, or raw material, group outputs will be inferior, even if the group members perform well on all the process criteria. Furthermore, serious resource constraints and acute shortages can lead to frustration, and even turnover, among potential high performers and can erode a group's long-term performance capacity. Resource availability is particularly critical in groups that are undergoing structural change or learning new techniques for handling their tasks. Managers responsible for introducing change sometimes expect performance to improve immediately without investing in the necessary processes of learning, training, and experimentation that occur during change. By singling out material and technical resources as critical variables that intervene between group processes and performance, the Action Model reminds managers and consultants to pay attention to seemingly mundane issues in addition to examining the availability of needed human resources, knowledge, and information.

Drawing on the Action Model, diagnostic studies can examine whether current conditions in each of these four areas lead to ineffective or effective performance.<sup>5</sup> For example, basing their work substantially on Hackman's model, Denison, Hart, and Kahn (1996) developed and validated a set of diagnostic questionnaire items for members of cross-functional teams. These items ask respondents to report the degree to which their team enjoys supportive facilitating conditions, handles team processes effectively, and obtains desired

outcomes. It is also possible to use the model to examine whether interventions by clients or consultants could appropriately concentrate on changing specific facilitating conditions or group processes.

Another way to use the model in diagnosis is to follow the problem-oriented, sharp-image logic explained in Chapter 1. The diagnosis would start with performance problems and then trace these signs of ineffectiveness back to difficulties in handling one or more critical group processes. Then, these difficulties can be followed back to the other elements in the model, such as group design and organizational context, which can hinder or facilitate group processes. For instance, a consultant or manager might trace problems of low quality in an industrial work group back to a critical process, such as pursuit of an inappropriate quality-assurance strategy. If the quality-assurance strategy is inappropriate, then the solution lies in redesigning the group's task (a facilitating condition) so as to include appropriate quality-assurance techniques. Suppose that the group did choose an appropriate strategy for quality assurance, but team members lack the skills and knowledge needed to implement the strategy. In this case, the solution lies in changing other conditions, such as coaching for skill use and development, training programs, or procedures for selecting team members.

Although the Action Model provides useful starting points for diagnosis, it does not reflect distinctive challenges and conditions facing divergent types of groups. The distinctive challenge for air traffic controllers, for example, is reliability, whereas a repertoire theater group faces problems of maintaining spontaneity and artistic vigor night after night. Similarly, groups and entire organizations face divergent challenges at different periods in their life cycles (Harrison & Shirom, 1999, pp. 299–324). Nor does the Action Model pay much attention to important “soft” aspects of group interaction, such as mutual expectations and understandings. An additional limitation is the model's heavy stress on measurable outputs, which could lead analysts and clients to pay less attention than needed to other dimensions of effectiveness and ineffectiveness. Finally, the Action Model builds in strong assumptions about the likely indicators and causes of ineffectiveness and the best ways to intervene to enhance group performance. Hence, the model may discourage users from attending directly to client concerns and from identifying causes and possible solutions that reflect the organization's distinctive features and the contingencies affecting it.

### DIAGNOSTIC METHODS AND PROCEDURES

This section examines the design and administration of a diagnosis of forces affecting individual and group outcomes. It also notes general issues that arise

in most diagnoses, no matter what questions or organizational levels are emphasized.

## Study Design

### *Deciding What to Study*

Consultants usually select topics for study in response to their clients' initial presentations of problems and in keeping with the preliminary diagnosis made during the entry period. For instance, the complaint about the argument-ridden, unproductive meetings cited at the beginning of the chapter might lead a consultant to explore the background to the arguments that plague the meetings. Preliminary conversations with participants might reveal major disagreements about program goals, along with a lack of mechanisms for working out such difficulties. In keeping with these findings, the consultant could explore goal-setting and decision-making processes more closely.

The choice of diagnostic topics also reflects the effectiveness criteria to be used in assessing individual and group behavior. In addition to the individual and group outcomes discussed in this chapter, many of the Internal System State criteria listed in Table 2.1 can serve as standards for evaluating work groups. Rancorous conflict, for example, can be treated as a sign of team ineffectiveness. Group effectiveness can also be evaluated in terms of capacity for satisfying the conflicting demands of multiple stakeholders (Tsui, 1990). Practitioners can apply some of the system resources and adaptation criteria (e.g., innovativeness and resource quality) in Table 2.1 to small groups by defining the group's environment as including other units within the focal organization along with parts of the organization's environment.

Having chosen a particular focus for diagnosis, the practitioner must define carefully the specific factors to be studied and decide on the best ways to obtain data on them. To start, practitioners can gather basic organizational information (see Chapter 2) and conduct a limited number of general orientation interviews (see Appendix A). They can design additional data-gathering steps as needed. For example, a consultant seeking to examine conflict management and problem solving could interview group members, paying particular attention to the kinds of issues that create conflicts and the ways that members and supervisors deal with these conflicts. These data might then be supplemented with observations of group meetings (see Appendix C).

Studies that focus on assessing HRM programs can compare data on actual practices to criteria derived from a goal statement or ideal standard (e.g., Case 6). Sometimes, a quasi-experimental design (Cook, Campbell, & Peracchio, 1991) may be used in HRM assessment. Suppose that the human resources unit of a large trucking firm sought to assess the effectiveness of a safety program that

gives cash bonuses to safe drivers. If the investigators can arrange to have drivers randomly assigned to the new program, they can compare the accident and traffic violation records of program participants before and after participation in the program. These results will be compared to those of the nonparticipants during the same period. Follow-up will be necessary to determine whether program effects erode over time, as they often do.

### *Sampling*

The data should be as representative as possible of the individuals, groups, and situations under study. For example, to discover the characteristic ways in which conflicts are handled, the practitioner would examine typical or representative conflict episodes and select a representative cross section of group members for interviews. To reach large numbers of people, self-administered questionnaires can be distributed to samples of members selected through probability sampling (Trochim, 2001). Probability samples can also be used to gather secondary data, such as absenteeism rates from large data sets. Practitioners rarely use complex probability sampling techniques to choose subjects for interviewing because of the high cost of conducting a large number of interviews. When small groups are to be interviewed or given questionnaires, all members are included, or a cross section of individuals are chosen who are likely to hold different perspectives.

In designing samples, practitioners of diagnosis consider the attitudes of group members toward the study and the uses to which the data will be put as well as strictly methodological considerations. If, for example, all members of a large division will receive feedback from a questionnaire about their departments' operations, it may be better to include everyone in the survey. By doing so, consultants may increase interest in the questionnaire study and enhance the believability of the feedback.

Data gathering through observation also raises sampling issues. Because large-scale observation is expensive and time-consuming, consultants usually prefer to observe important meetings, training sessions, or crucial work activities in which members interact intensively and many aspects of group relations can be seen at the same time (see Appendix C). It is best to choose settings for observation that are as central to group operations as possible because behavior can vary greatly from one context to another (e.g., headquarters vs. field operations). A unit may also operate differently when it convenes as a whole than it does when its members work alone or in subgroups.

### *Administering the Study*

Procedures used to gather, store, and analyze the data should promote sound relations between consultants and members of the organization as well as

provide valid diagnostic data. Practitioners should make it clear to members of a client organization that they will store and process the data professionally and maintain the confidentiality of participants. Moreover, they should explain that only group-level results will be reported to preserve the anonymity of individual members.

### **Measurement and Data-Gathering Techniques**

By using a combination of data-gathering techniques, consultants can enhance the validity of their findings. The following discussion emphasizes questionnaires because of their popularity and appropriateness to the individual and group levels of analysis.

#### *Analyzing Available Data*

Practitioners can extract data on the social or personal characteristics of work group members from the personnel files of a client organization or ask to have such data prepared for them. Most for-profit organizations and an increasing proportion of not-for-profits also have records of group outputs, such as sales, productivity, product quality (e.g., percentage of products serviced under warranty), and services delivered (e.g., the number and type of outpatient visits to a hospital clinic). Organizational publications and records may also provide information on processes, structures, technologies, and purposes, but such information will be difficult to code and quantify. Documentary data almost always need to be supplemented with information on emergent practices (see Chapter 4).

Organizational documents or records frequently reflect the perspectives of those who gathered the information and the reasons for which it was originally gathered. Employee evaluations used to make decisions about pay raises, for example, may reflect pressures on immediate supervisors to present their subordinates in a favorable light. In contrast, negative comments about these employees by more senior managers may reflect a desire to avoid granting raises automatically. By examining both sets of views, the practitioner can better understand the ways that members of the focal organization interpret employee behavior and the factors shaping their interpretations. The practitioner cannot accept either set of evaluations as unbiased, however.

#### *Interviews*

Besides examining individual attitudes and behavior, interviews can include relevant questions on other topics from the General Orientation Interview (Appendix A), focus on selected human resource programs, or delve into critical group processes and outcomes. In seeking information about groups,

divisions, or entire organizations, investigators need to pose questions that fit the positions and organizational level of respondents. For example, department heads may provide basic information on department regulations, history, and working relations with other departments; their subordinates may have little knowledge in such areas. In contrast, subordinates sometimes know better than their boss how work is actually done.

Interviews and questionnaire studies are often subject to bias because respondents seek to present themselves in a favorable light or withhold information that might be used against them, such as negative descriptions of supervisors. By conducting interviews with members from different backgrounds and locations within a unit and listening carefully to their accounts of important issues, investigators can become aware of members' distinct perspectives and viewpoints. For example, department heads might characterize their organization as dealing honestly and directly with employee grievances, whereas subordinates complain that their grievances are ignored or minimized by management. The people interviewed may be unaware of such a diversity of viewpoints or intolerant of the feelings and perceptions of others. In such cases, consultants can summarize the various viewpoints during feedback to stimulate communication and encourage people to respect diverse perspectives and opinions. In other instances, consultants can simply take note of divergent viewpoints and avoid giving undue weight to one particular interpretation when formulating their own descriptions and analyses.

By building relations of trust with group members, consultants can sometimes overcome people's reluctance to reveal sensitive information during interviews. Practitioners may also gain the trust of one or more members of an organization who are knowledgeable about organizational affairs but are somewhat detached from them.<sup>6</sup> Assistants to high-level managers, for example, often have a broad view of their organization and may be more comfortable describing it than are the top managers. When such well-placed individuals trust consultants, they may provide useful information about sensitive subjects, such as the degree of influence of managers who officially have the same level of authority or staff members' past reactions to risk-taking behavior. Gathering such sensitive information poses tricky ethical issues, several of which are discussed in Chapter 6.

### *Self-Administered Questionnaires*

Self-administered questionnaires provide the least expensive way of eliciting attitudes, perceptions, beliefs, and reports of behavior from many people. Questionnaires can be administered in person or by mail, telephone, or Internet (Miller & Salkind, 2002; Stanton & Rogelberg, 2001). Aggregations

of individual responses can also provide a substitute for behavioral measures of group and organizational phenomena. Although questionnaires typically use fixed-choice answers, a few open-ended questions can be included to give respondents an opportunity to express themselves. Responses to such open-ended questions are often informative but difficult to code. Questionnaires composed of items drawn from previous research studies and standardized organizational surveys can be prepared and administered rapidly because there is less need to develop and pretest the instrument. By including standard measures, consultants may also be able to compare the responses obtained in the client organization with results from other organizations in which the same instrument was used.

### *Standardized Instruments*

Many standardized organizational survey instruments have been developed, which can be used in diagnostic studies (see Appendix B). Examples include the well-documented Michigan Organizational Assessment Questionnaire (MOAQ; Cammann, Fichman, Jenkins, & Kelsh, 1983) and the related instruments in the Michigan Quality of Work Program (Seashore, Lawler, Mirvis, & Cammann, 1983). These instruments were often used in research and served as models for many subsequent instruments. MOAQ includes seven modules that cover individual performance (based on self-reported effort at work) and QWL outcomes (including job satisfaction). Also included in measures of individual responses to the job are intentions and opportunities to leave the organization or job. Other scales cover characteristics of jobs, roles, and tasks; identification with work and the organization; adequacy of training and skills; perceived determinants of pay and importance of various types of rewards; and several facets of supervisory behavior. There are also measures of some group characteristics and processes, including diversity, goal clarity, cohesiveness, involvement in decision making, fragmentation, and openness of communications.

To create a more comprehensive diagnostic instrument, practitioners can supplement data from MOAQ and other studies based on individual perceptions with more behavioral data on individual working conditions and outputs (Higgs & Ashworth, 1996). Data can also be gathered on additional facets of group performance, such as output quantity and quality, goal attainment, innovativeness, efficiency, morale, and reputation for excellence. The Organizational Assessment Inventory (OAI; Van de Ven & Ferry, 1980) provides scales in these areas, as well measures of group diversity and group processes, including conflict management, and normative pressures. Structural features assessed by OAI include control systems, job standardization, role relations, work and unit

interdependencies, work flows, and authority distribution. OAI contains separate questionnaires for supervisors and group members so that comparisons of their attitudes and reports can be made. Other instruments within OAI assess divisional (interdepartmental) and organization-level phenomena. Additional factors, such as group or organizational norms and culture, can be assessed with the aid of instruments such as those described in Appendix B.

To obtain data on group-level phenomena from questionnaires such as MOAQ and OAI, the responses from members of a particular work group or administrative unit are averaged to create group scores. For these averages to be meaningful and useful in analysis and feedback, the questionnaires must specify clearly which work groups and supervisors are referred to.

#### *Advantages and Drawbacks of Standardized Questionnaires*

Instruments such as MOAQ and OAI contain ready-to-use scales that usually produce valid and reliable measures for many organizational settings. In keeping with current research and organizational theory, these instruments reflect the assumption that there is no one best way to organize groups or organizations. Instead, the optimal combination of system traits is assumed to depend on many variables, including environmental conditions, tasks, technology, personnel, history, and size of the organization.

Despite their appeal, standardized diagnostic instruments also have serious weaknesses and drawbacks. First, they may give practitioners a false sense of confidence that all the factors relevant to a particular client organization have been covered adequately. Second, standard questions are necessarily abstract; hence, they may not be fully applicable to a particular organization or situation. For example, a typical questionnaire item in MOAQ asks respondents to indicate their degree of agreement with the statement, "My supervisor encourages subordinates to participate in making important decisions" (Cammann et al., 1983, p. 108). The responses to this general statement, however, may mask the fact that the supervisor encourages participation in decisions in one area, such as work scheduling, while making decisions alone in other areas, such as budgeting. To obtain data on such situational variations, investigators must determine the situations across which there may be broad variations and write questions about these situations (Enz, 1989; Moch, Cammann, & Cooke, 1983, pp. 199–200).

Third, as in any questionnaire, even apparently simple questions may contain concepts or phrases that may be understood in different ways. For instance, when reacting to the statement, "I get to do a number of different things on my job" (Cammann et al., 1983, p. 94), one person might view diversity in physical actions (e.g., snipping vs. scraping) or minor changes in the tools needed for the



job, whereas another would consider all of these operations as “doing the same thing.” Fourth, questionnaires are especially vulnerable to biases stemming from the respondent’s desire to give socially acceptable answers or to avoid sensitive issues. There may also be tendencies to give artificially consistent responses (Salancik & Pfeffer, 1977; but cf. Stone, 1992). Some instruments include questions designed to detect or minimize biases, whereas others may heighten the risk of bias by phrasing all questions in a single direction.

### *Observations*

Observations can help consultants obtain an idea of the actual behavior and processes that occur within an organization and the ways that members view their work and the organization as a whole. Direct observation can also provide practitioners with data that are more independent of people’s interpretations and viewpoints than are responses to questionnaires and interviews. People are often not very good observers of the actions occurring within their groups. Often, they cannot describe group norms, beliefs, and informal behavior patterns or are reluctant to do so. Because observation is time-consuming and requires keen skills, it is often reserved for the analysis of top management groups, whose decisions and solutions to problems are critical to the organization as a whole.

Meetings make an ideal focus for observations. Managers and professionals spend much of their time in meetings, and meeting outcomes form an important part of managerial outputs. Moreover, participants often find meetings to be frustrating and nonproductive. Hence, they may be interested in having consultants help them improve the effectiveness of their meetings.

### *Observational Techniques*

Consultants can structure observations in terms of a general accounting scheme (see Appendix C; Perkins, Nadler, & Hanlon, 1981) or predefined categories for coding observed behavior (Weick, 1985). Experienced practitioners may also conduct unstructured observations to remain open to unanticipated phenomena.

Unless observers use a highly structured coding scheme, they briefly record the observed behavior of the participants using descriptive, nonevaluative language. For example

- Chairperson shouts for order.
- Workers consult each other over how to get the machine going again.
- Nurses are quiet, do not participate in the discussion of the case.

Notations on observed behavior such as these provide the basis for subsequent inferences about group functioning. For example, repeated observations of workers helping each other handle operational snags may lead consultants to conclude that relations between workers are cooperative and facilitate independence from supervisors and technicians. Including such concrete descriptions of behavior will also make feedback more useful to group members. If the practitioners have used a list of topics to guide their observations, they can summarize their findings for each topic and add illustrative descriptions from their notes.

Before beginning observations of a particular setting, investigators often try to learn as much as possible through interviews or informal conversations about the backgrounds of the people to be observed, their roles, the nature of the task facing the group, and the ways that this task or similar ones have been handled in the past. If taking notes during the observation will disturb group members, observers can write their notes as soon as possible after the observation. With practice, observers can recall entire conversations or discussions and record them after completing the observation. Things that the observer did not understand can be clarified through repeated observations or discussions with participants. Additional observations of the group under differing circumstances and repeated observations of similar events will help the observer distinguish between recurring and one-time phenomena. After a clear picture has emerged, results can be compared to those obtained from other data sources and prepared for analysis and feedback.

### **Analysis**

Analysis of diagnostic data can draw on the logical and statistical procedures used in nonapplied research (Hoyle, Harris, & Judd, 2001; Trochim, 2001). Once summarized, nonstatistical data can be analyzed with the help of diagrams such as Figures 3.1 and 3.2. The main findings about each of the categories shown could be recorded on an enlarged version of the figures. The arrows between the boxes could be labeled to describe important system interactions. For example, a summary based on Figure 3.1 might display a link between the tasks of clerical workers (limited authority and access to information) and their job orientations (boredom and alienation). Beneath the figure, supporting evidence of the relation could be recorded, such as the observation that clerical employees who were given more responsibility and information showed higher motivation and less boredom.

An alternative approach is to create a visual model that summarizes the links between sources of ineffectiveness and ineffective outcomes of greatest concern to clients. A similar approach can be used to map the forces most likely to help groups or the organization as a whole face a major challenge,

such as attainment of dramatic improvements in client satisfaction or service quality.

If the study includes standard, quantifiable measures of effectiveness and its predictor variables and if data are available for a set of organizations, consultants can benchmark the client organization against the baseline data. More frequently, practitioners make statistical or qualitative comparisons of units within a single organization. They then prepare the data for feedback to group members or plan further study of groups with unusually high or low scores. If data available at the start of a diagnosis suggest that some units are outstanding on important features or are particularly problematic, consultants may focus much of their investigation on these units.

Before undertaking extended multivariate analyses of questionnaire data, practitioners should decide how heavily their diagnosis will rely on these analyses. Alternatively, they could use other methods to gather additional information or provide members of the client group with the major single or bivariate distributions and encourage them to try to account for the findings from their understandings of the organization. Whatever approach is chosen, the data should be presented in an appealing and easy-to-understand form. Reports and trade literature that circulate in a client organization may suggest appropriate formats for presenting data.

## **Feedback**

### *Procedures*

Wide variations exist in procedures for providing feedback from diagnostic studies (Cummings & Worley, 2001, pp. 130–141; Nadler, 1977). Practitioners may give feedback only to the client or clients who called for the study. More frequently, where feedback encourages group problem solving, consultants present their results to all participants in the study or to everyone affected by its findings. Consultants can give feedback to supervisors and subordinates in an organizational unit separately or simultaneously. A danger in providing feedback simultaneously is that supervisors often experience conflicts between receiving criticism and being expected to lead a discussion about planning appropriate action. An alternative design involves providing feedback to task forces or other temporary groups that cut across departmental and hierarchical lines. These groups are assigned responsibility for planning the organization's response to the findings.

In client-focused diagnoses in organization development consultations, consultants usually try to collaborate with members of the client organization to interpret the findings and decide how to deal with them (Burke, 1982, p. 162).

First, the consultant presents a summary of the data and a preliminary analysis. A discussion usually follows in which consultant and participants clarify the findings. Then, the practitioner and group members discuss the implications of the data for action.

### *Feedback Characteristics*

Whatever form feedback takes, people are more likely to accept and act on feedback that has the following characteristics (Block, 1981; Cummings & Worley, 2001, pp. 130–133):

- Relevant and understandable to members
- Descriptive rather than evaluative
- Clear and specific—referring to concrete behavior and situations, illustrating generalizations
- Comparative, including comparisons to similar units or organizations
- Timely—given soon after data gathering
- Believable—providing information about the validity of the data
- Sensitive to members' feelings and motivations rather than provoking anger, defensiveness, or feelings of helplessness
- Limited rather than overwhelming
- Practical and feasible—pointing to issues that members can do something about
- Unfinalized—leaving room for members to contribute to data analysis and make their own decisions about implications for actions

Even if practitioners cannot meet these exacting standards completely, they can improve their effectiveness by changing their feedback procedures so that they are closer to these ideals.

## EXERCISES

### 1. Using Questionnaires to Diagnose Group Processes

Choose two work groups or units on which background information is available. These groups should perform similar tasks and have similar types of employees. Try to locate one group reputed to have positive features (e.g., high work quality or positive staff relations) and another that seems weak in the same areas. Develop a questionnaire on key aspects of group process with approximately 10 questions drawn from one or more of the standardized questionnaires

discussed in this chapter and Appendix B. Distribute the questionnaire to members of both groups after you have explained that the data will be used only for an exercise and will not be distributed to anyone outside of the groups. Prepare a summary of the average responses to each question for the two groups and compare your results to the previous information you had on the groups. If the results differ from your expectations, try to account for these differences. Explain how you would give feedback to the supervisors and members of both groups to facilitate constructive discussion and problem solving. If requested, prepare a separate summary of the findings for each group.

## 2. Observing Meetings

Discuss problems or challenges facing a group with one of its leading members. Choose features of group behavior, processes, and culture discussed in this chapter or listed in Appendix C that might be related to these problems or challenges and can be readily observed during group meetings. Observe at least two meetings of the group. Write a report on the following topics:

1. Background on the group and the meetings (type of meetings, purpose, and circumstances; e.g., weekly staff meeting or ad hoc session), participants, and organizational context
2. Summary of observations of the selected features
3. Criteria for evaluating group effectiveness
4. Sources of effectiveness and ineffectiveness
5. Nature of presented problems or challenges and possible ways to address them
6. Additional ways to improve effectiveness or reduce ineffectiveness
7. Procedure for providing feedback to participants

## 3. Assessing Human Resource Management Programs

Choose one HRM function, such as staff development, from the lists in this chapter. Interview the manager who has the most direct responsibility for administering operations in this area, such as the director of personnel. Ask this person to define the organization's needs and activities in this functional area in terms of the desired individual and group characteristics or outcomes. Ask what standards are currently used to assess whether these needs are being met and whether any internal or external developments require redefinitions of these needs and standards. Based on this interview, write a proposal to diagnose the extent to which current HRM programs, such as on-the-job-training, meet current and anticipated needs. Be specific about the units of analysis, the

kinds of data to be gathered, and the types of inferences you will make from these data.

### NOTES

1. Following current usage, the terms *group* and *team* are used interchangeably.
2. Figure 3.1 and the following discussion draw in part on Lawler, Nadler, and Mirvis (1983, pp. 20–25); see Harrison and Shirom (1999, pp. 145–165) for further discussion of this model and references to the research literature.
3. This case derives from a report by Adler and Bartholomew (1992) of a study of human resource programs in 50 North American firms.
4. This presentation of the model reflects both the work of Hackman and colleagues and a modification and critique in Harrison and Shirom (1999, pp. 166–173).
5. See Appendix B in this volume for an instrument development by Hackman and colleagues.
6. In anthropological studies, such individuals are called *informants*, a term that cannot be used in diagnosis because of its negative connotations.