



Organizational Consulting to Groups and Teams

Arthur M. Freedman
*School of Public Affairs
American University*

Skipton Leonard
Personnel Decisions International

Despite the popularity of organizational teams today, they have not always been so valued (Leonard & Freedman, 2000). In fact, prior to the twentieth century, most scholars in the late nineteenth century viewed collective behavior, shared governance, and decision-making with a good deal of suspicion. Le Bon ([1895] 1960) described the collective behavior of the common man during the French Revolution and the Third Republic as primitive and childlike. In the early industrial revolution when labor was cheap and efficiency less important, production was increased by massing individual workers around individual machines rather than organizing them into teams. Early industrialists might have concluded that there was no advantage to encouraging workers to communicate and interact, thereby risking the development of rebellion and collective resistance to the will of the leadership. It might have been considered wiser to keep workers ignorant and highly dependent on the organizational leadership.

After World War II, Kurt Lewin (1947) and his students launched the field of group dynamics within social psychology. Most of the research that is the foundation for current group and team development methodology was completed in the twenty years following Lewin's untimely death in 1947. The advent of technology that allowed people anywhere in the world to work and share information concurrently has greatly increased the popularity of teams in organizations. Many organizations today are organized around teams as the fundamental structural unit (Mohrman, Cohen, & Mohrman, 1995). By the late 1980s and early

1990s the virtues of high-performance and cross-functional teams were being touted by organizations and organizational theorists alike (for example, Katzenbach & Smith, 1993; Reich, 1987; Vaill, 1989). In the last half-decade of the last century, the popularity of virtual teams using the most advanced communications technology to work collaboratively has created the need to reexamine the basic tenets of group and team theory and practice. This chapter provides the consulting psychologist with fundamental knowledge necessary to consult traditional intact (collocated) teams, as well as the currently popular virtual teams that link members from distant parts of the organization and the world. We will also provide a discussion of future trends for group and team theory and practice.

UNDERSTANDING GROUPS AND TEAMS

It is practical to conceive of teams and groups as being the extremes of a developmental continuum. In this view, a group is merely an aggregate or collection of individuals, whereas a team is composed of members who are committed to realizing a common mission (task) and have developed a consensual perception of the goals that they must achieve by performing various tasks (McFarland, Leonard, & Morris, 1984). Teams are characterized by interdependency and accountability (Lipnack & Stamps, 1997; Katzenbach & Smith, 1993; Rawlings, 2000), and usually require the continuous integration of the expertise distributed among them (Donnellon, 1996).

Teamwork is the term used to describe the coordination of efforts and integration of expertise among team members who perform the tasks that culminate in achieving the goals that fulfill the team's mission. The degree of required coordination and integration of effort varies widely from team to team. Using a sports team analogy, golf and ski teams require little coordination and integration, while baseball and football teams require moderate to high levels of coordination and integration, respectively (McFarland, Leonard, & Morris, 1984; Keidel, 1984). In business organizations, project teams require greater coordination and integration of effort than do management teams. A high degree of collaboration is expected between members of management teams, but a complete integration of activities and efforts is generally not. The complete removal of functional boundaries between management team members is difficult and probably not desirable. Table 2.1 displays a variety of common team types along a continuum of low, medium, and high requirements for interdependence, collaboration, and communication.

Teams that require more interdependence, collaboration, and communication have more of a feeling of "teamness" (that is, having a group identity, sense of camaraderie, and cohesiveness) than teams lower on those dimensions. These

Table 2.1. Level of Communication Required in Relation to Team Type and Task Requirements.

<i>Need for Communication/Collaboration</i>		
Low	Medium	High
Team Type		
<ul style="list-style-type: none"> • Committees • Special interest groups • Work groups • Task force • Improvement teams • Department groups 	<ul style="list-style-type: none"> • Cross-functional teams • Leadership teams • Process teams 	<ul style="list-style-type: none"> • Self-directed work teams • Project teams • High-performance team
Team Task Requirements		
<ul style="list-style-type: none"> • Individual decision-making • Recommendations • Information sharing 	<ul style="list-style-type: none"> • Team and coordinated individual decisions • Strategic planning • High coordination 	<ul style="list-style-type: none"> • Consensus joint decisions • Accountable team outcome • High level of working together • High level of alignment

Source: Personnel Decisions International, 2001. Used by permission.

are also the kinds of teams that recent authors (for example, Katzenbach & Smith, 1993) have referred to as high-performance teams. It should be kept in mind, however, that there are lots of effective and useful teams in organizations that require more limited or moderate degrees of interdependence, collaboration, and communication. For instance, many task forces meet primarily to do general planning and to distribute the necessary work to individual team members, who then work more or less independently. A high degree of communication and collaboration may not be necessary for these teams.

Teams From a Systems Perspective

Several decades ago it was common to consider teams as isolated, functional organizational entities without considering the organizational system in which they were embedded. In contemporary project-oriented organizations, viewing teams as isolated units makes no sense at all. Consider the cross-functional team composed of members from many other functional teams. The ripple effect of any decisions made within the cross-functional team across the rest of the organization is enormous by design.

From a systems perspective (Katz & Kahn, 1978; Fuqua & Newman, 2002; Von Bertalanffy, 1968), teams are subsystems within a larger organizational system. Figure 2.1 presents a systems view of an organization with a team-based structure. In this simplified schema, functional team members support the work of project teams. Organizations negotiate in the labor and supplier markets to obtain necessary inputs. These supply inputs are then transformed in the throughput process (work) to produce products that have value in the organization's internal or external customer markets. Subsystems within the organization rely upon interactive feedback loops with the customers, financial, supply, and labor markets to make decisions about level of production, product mix, product timing, financing, purchasing, and hiring.

Mohrman et al. (1995) describe three typical ways that team-based organizations can structure their throughput process. These include the project team structure, in which each member of a team represents a different function and more than one reporting line. In the functional team structure, a project team structure is laid over the formal organizational structure and members continue to report directly to their functional managers. Finally, in the matrix team structure, team members report directly to both project and functional managers.

Task Accomplishment and System Maintenance

Both task accomplishment and system maintenance are vital to any organizational system, no matter the organizational level. The strategic goals of the organization, no matter how well conceived and initiated, cannot be achieved effectively if the integrity and well-being of all system components degrade as a result of neglect, apathy, or oversight. Analysis of team and organizational success consistently reveals the importance of process and roles to maintain and improve the system's infrastructure, both human and physical. For instance,

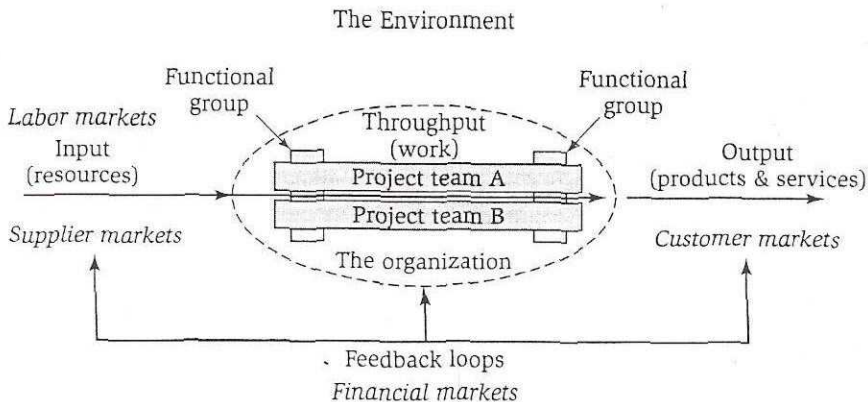


Figure 2.1 Systems View of a Matrixed Organization.

early group and team research (for example, Bales, 1950; Beck, 1981) revealed that *task and socio-emotional leadership roles are inevitably differentiated* as groups and teams struggle to achieve their goals. Without constant investment in physical and human system maintenance, organizations invariably succumb to *Newton's second law of thermodynamics (the law of negative entropy)*—all systems move toward disorganization, decay, and death without a constant infusion of energy for system maintenance.

Linking and Coordinating Team Efforts

A common dysfunctional phenomenon in traditional functionally structured organizations is commonly termed “siloeing.” Without effective linking and coordinating processes, communications tend to travel vertically up and down through the functions with limited cross talk between functions, project teams, and business units, often regardless of their interdependency. Throughout the 1990s, management looked for ways to make the boundaries between functional “silos” more permeable. One common structural solution tried by organizations to neutralize this problem was the creation of cross-functional project management teams, steering committees, and task forces. In theory, these teams typically have planning and coordinating functions, and each team member represents the interests and perspectives of their function or project (Freedman, 2000). The advent of e-mail, intranets, groupware, and tele/videoconferencing has opened up huge possibilities for faster communication over infinite distances to a multitude of involved parties, but has also created a host of new problems for teams.

Team Communications

When teams members are physically located near each other (collocated), direct face-to-face communications are relatively easy. When team members have visual contact with each other in personal discussions and team meetings, they are able to pick up nonverbal as well as verbal information. Communications theorists (for example, Watzlawick, Beavin, & Jackson, 1967) have long noted that messages have both a *content* aspect (the data of the communication) and a *relationship* aspect (how this communication is to be taken). For instance, “John, take this letter to the mail room,” not only instructs John to deliver a letter, but also defines the relationship as a superior giving orders to a subordinate. The quality of the relationship aspect of a communication is frequently delivered by nonverbal behavior or contextual indicators, while the content aspect is usually delivered either verbally or in written form.

Understanding the relationship message usually takes precedence over understanding the content. Most people attach a higher level of importance to the relationship message because it tells them how to understand and what to do with the content. Since relationship messages are frequently delivered through

nonverbal and contextual cues, careful attention is directed to these aspects. When there is a contradiction between relationship and content messages, the relationship message is perceived to be more valid. Relationship messages, mostly based on nonverbal behavior (facial expression, body movement, gestures, voice tone, inflection, pitch, volume, context, and others), are perceived as more honest because they are assumed to be under less conscious control than the actual words spoken or written (Watzlawick et al., 1967). The lack of visual and auditory contact, ignorance of cultural behavior styles, and linguistic nuance create significant obstacles to the accurate comprehension of the relationship aspect of messages in virtual teams and cross-functional teams that are trying to communicate over great distances, between different and alien cultures, or using non-native-tongue languages.

Team Boundaries

In systems theory, boundaries can refer to physical (for example, discontinuities or barriers in space), temporal (beginnings or endings), behavioral (norms and roles), or process (input-throughput-output) features. Teams have a number of boundaries that have practical significance. First, teams have membership boundaries. Membership boundaries are more psychological than physical. As most of us have experienced sometime in our lives, there are times when we are technically counted as a member of a team when we don't feel like or are not perceived as a member of that particular team. Other important team boundaries include space (increasingly less relevant with teams connected only by digital or electronic means, so-called distributed teams), time (full- or part-time membership), primary task (what the team should and shouldn't be doing), and norms and roles (expected and permissible behavior). Effective team leadership cannot occur without managing the particular issues that are relevant to each of these team boundaries.

Norms prescribe the rules (written or unwritten) for behavior and proper ways of acting that have been accepted as legitimate and acceptable for all members of a team. In systems terms, norms (as well as roles) are filters that allow certain kinds of behavior and not others as appropriate and acceptable (Berrien, 1968). Norms are typically based upon commonly held assumptions about the need for the rule or convention (Hall, 1976; Schein, 1992). Within each culture, it can be expected that members understand and accept these assumptions. When cultural boundaries are crossed, however, this expectation is not warranted. Individual members of teams that have cross-organizational, geographical, and cultural boundaries will likely ascribe to different sets of norms that prescribe acceptable role behavior (Hofstede, 1991; Schein, 1992; Trompenaars, 1994). Furthermore, the various organizational subsystems and functional groups that generally have distinctive cultures can create problems in transacting business across internal organizational boundaries.

The assumptions that undergird these norms are seldom surfaced, leading to confusing behavior and considerable misunderstanding (Argyris & Schön, 1992). The lack of agreement regarding norms and assumptions is a formidable obstacle to high performance for teams whose members are distributed across functions, organizations, time zones, and regional or national cultures.

The Impact of Reward Systems on Teams

Organizations use rewards to create incentives to motivate employees to work hard to achieve goals identified by the organization. Traditionally, most incentives have been linked to individual performance. While this approach does, to some extent, encourage individual achievement, it also sets up the potential for competition with fellow employees because salary and benefit decisions are usually zero-sum situations. Because salary increases come from a fixed pool, giving one person a larger raise necessarily reduces the amount available for others. This is also true for the other forms of rewards for individual performance (for example, recognition, choice assignments, promotions, and the like) (Lawler, 2000).

In most cases, intra-team competition for scarce individual rewards inhibits collaboration, cooperation, and communication, and reduces trust, making teamwork much more difficult. In the past, many organizations that moved from traditional to team-based structures overlooked the need to develop significant rewards for team as well as individual accomplishment (Hackman, 1990). This is especially true for high-performance teams for which the perception of a joint destiny (that is, “we all win or lose together”) provides a powerful incentive for collaboration, cooperation, and fearless communication (Lipnack & Stamps, 1997).

Group and Team Dynamics

One of the paradoxes of teams is that diversity and individuality are prized in assembling teams and then all team members are expected to pull together as if there were no significant differences in team members’ interests, loyalties, goals, values, outlooks, or personality makeups (Donnellon, 1996). Each team member must come to terms with the inescapable tension created by the dilemma of simultaneously feeling the desire to behave as a unique individual while at the same time recognizing the need to suppress their individuality (and to make personal sacrifices) in order to coalesce into a cohesive high-performance team (Lipnack & Stamps, 1997; Donnellon, 1996). This dilemma is magnified in cross-functional and management teams in which members are expected to represent separate, distinct, and diverse stakeholder groups while at the same time working together as a unified team with a common mission and joint destiny.

Koestler (1967) uses the term “holon” to express this transcendent notion of being simultaneously a whole in and of itself and a part within larger systems. Resolution of this dilemma allows teams to develop the fluidity and interchangeability of roles that are characteristic of high-performance teams. Teams

mature and develop when members are able to transcend thinking of themselves as either leaders or followers and realize that they must be *both* in order for the team to reach high performance levels.

Collective Unconscious and Hidden Agendas. Bion (1961) noted that the actual behavior of teams was frequently at odds with the stated purpose of the group. Bion noted that the group was acting as if the reason for the group's existence was other than the publicly stated purpose. These mysterious and often baffling behaviors were termed group dynamics, and represented shared unconscious-motivated behaviors (that is, the group-as-a-whole's collective unconscious) or conscious but devious behaviors (hidden agendas), depending upon which psychological persuasion (psychoanalytic versus behavioral) one ascribed to.

Regardless of which school of psychology theory is used to explain the behavior, the phenomenon noted by Bion and others was clearly observable. At various points, groups seem to operate under some basic assumptions about the group. While Bion did not posit any particular order to their emergence, the group seems to act as if the following assumptions are true: *dependency*—the group acts as if it is helpless and totally dependent upon the task leader to provide answers and direction; *fight/flight*—the group acts as if the reason that the group is meeting is either to fight or flee someone or something; *pairing*—the group acts as if strong bonding between two group members will unify the group and resolve intra-group conflict and ambivalence toward leadership and authority. The group hopes that effective leadership (a metaphoric messiah) will result from this union.

Group and Team Leadership Roles

In common usage, leadership is generally considered along one dimension, task leadership. After all, if a team is defined as a group of individuals with a common mission, it might seem that leadership is simply influencing others to follow them in the pursuit of particular goals. This common-sense explanation would hold if it were not for the me-versus-we dilemma just discussed. It is typical, for example, for some or all team members to resist external efforts to define the goals and set direction for the team. There are cultural differences in the degree to which this dynamic occurs, but it can be observed to some degree in teams in virtually all cultures. Such resistance can lead to emotional conflict and threaten the integrity and further development of the team. In order for the team to make progress in defining and achieving its goals, other forms of leadership inevitably emerge and contribute to a rich and dynamic team interaction. The following typical team leadership roles generally emerge as teams develop (adapted from Beck, 1981).

Task Leader. The task leader knows most about the task and the expectations of the environment. The task leader also helps the group to develop reasonable goals, action plans, accountabilities, rules, communication methods, decision-making styles, and others. *She/he also influences evaluation of individual and team performance.*

Emotional Leader. The emotional leader has the greatest personal investment in the group's task and is usually the best-liked member. He/she is concerned with the smooth running of the team, with active and positive participation, relationships, and interactions. The emotional leader models collaboration and cooperation, supports others, and receives support in return. The emotional leader is most likely to call attention to relational differences in the team's process, and try to resolve or smooth over these difficulties.

Limits/Assumption-Testing Leader. The limits/assumption-testing leader facilitates the clarification of assumptions and the testing of limits and boundaries. This person is particularly sensitive to the level of cohesiveness in the team, and to situations in which individual differences are being submerged. These individuals are highly invested in the task. Being willing to take risks, this individual is seen as off-track early in the team's work and frequently becomes the object of negative feelings. As the team matures, however, this leadership is increasingly valued.

Commitment Leader. The commitment leader is ambivalent about the task or about participation in the team, and therefore facilitates the team to test the extent of appropriate commitment of team members to each other and to the task. This individual is also sensitive to the team's inconsistencies and inability to set realistic limits and expectations for itself.

In order for the team to achieve its mission (task accomplishment) while holding together in spite of the diversity of personal goals, values, outlooks, and personalities (system maintenance), these roles must emerge. Task leadership pushes for cohesion and alignment of activity. *Limits/assumption-testing leadership ensures that individual and stakeholder concerns are not submerged in the quest for alignment and unity of purpose.* Commitment leadership challenges the team to develop goals that are relevant and achievable.

Finally, emotional leadership tries to balance competing interests, and encourages harmonious relationships in order to keep internal conflict from causing team disintegration. Team members have skills, attitudes, and personalities that make them more or less suitable for each of these leadership roles (Beck, 1981). Early in a team's life, there is often competition for primacy in enacting these roles (especially the task leadership role) and individuals get locked into one leadership role. As the team matures and moves toward higher

performance, team leadership is more fluid and team members may express several leadership roles (Beck, 1981).

Decision-Making in Groups and Teams

All teams must address the manner in which they make decisions. In traditional hierarchical organizations, decision-making has been the prerogative and responsibility of leadership. Historically, teams formed to perform tasks and missions that were well understood and routinized, or in which speed and coordination were of primary importance, relied primarily upon the formal task leader for decision-making. For these reasons, the task leaders in military, production, surgical, and football teams have retained strong decision-making prerogatives. With the increased use of teams to deal with complex issues in which the quality and acceptance of decisions were more important than speed and integrity of the chain of command, varying forms of group decision-making have increasingly been used. Research on individual versus group decision-making consistently demonstrates that group decisions are generally of higher quality when appropriate procedures are used in situations in which no one person has all the required knowledge and skill (see, for example, Barnlund, 1959; Lane et al., 1982). Although there is little systematic research to support the belief that participation in decision-making increases acceptance of the decision, this is a fundamental tenet of democratic decision-making.

The increase in decision quality and acceptance, however, must be balanced against the additional time required. In many cases the demand for quality and acceptance is not sufficient to warrant a group decision-making procedure (Husband, 1940; Marquart, 1955; Taylor & Faust, 1952). Maier (1970) presents a model that teams can use to decide what level of team involvement in decisions is most appropriate. Decisions that require high levels of acceptance and quality are best made using a rigorous consensus process—everyone must agree with the resulting solution. For solutions that require high levels of acceptance but have lower quality requirements, considerable time can be saved by using a simple majority decision-making rule. Solutions that require high quality but don't have high acceptance requirements are best tackled by a small group of content experts. Finally, decisions with low requirements for both quality and acceptance can be quickly and efficiently made autocratically (the proverbial executive decision) without sacrificing solution effectiveness.

Team Development

Bennis and Shepard (1956) provided one of the earliest models of group development. In this model, groups move from early phases of dependency and conflict (Bion's basic assumptions of dependency and fight/flight) before resolving authority issues in relation to any perceived leader, making interdependency, intimacy, and creativity possible. After a number of researchers

provided variations on the same themes (Mills, 1964; Mann, 1966; Slater, 1966), Tuckman (Tuckman & Jensen, 1977) provided a simplified model, which included the familiar forming, storming, norming, and performing phases of group development.

One criticism of the basic Tuckman model (Tuckman & Jensen, 1977) is that it does not take into account some of the basic differences between the self-analytic groups that early theories were based on, and typical work teams. Some key differences are: the teams are typically launched within already existing organizations, and are staffed by people who are not strangers and need to interact with each other outside of the team and beyond the team's life; teams need to review their work, redefine their mission, deal with the coming and going of members over the life of the team, and periodically renew their commitment to the mission as it evolves. A model, which integrates the research on teams and groups, is presented in Table 2.2.

Representational and Virtual Teams

The previous section discussed issues related to traditional intact teams, which are collocated and have stable memberships. While some early organizational development (OD) researchers and practitioners (Galbraith, 1973) had advocated the use of representational teams, the problems of integrating and coordinating the efforts of teams that spanned distance and organizational boundaries precluded their widespread use through the late 1980s. Allen (1977), for instance, noted that the probability of team members communicating or collaborating decreases logarithmically with gaps of as little as five to ten meters between offices.

The advent of easier distant communication via tele/videoconferencing, faxes, wireless radios, cell phones and pagers, streaming audio and video, video-phones, and the internet/intranets (that is, e-mail, listservs, and interactive websites such as chatrooms) made representational and virtual teams much more feasible. Connell (2002), in a later chapter, provides a detailed discussion of the relevant issues that consulting psychologists need to consider in consulting to virtual teams. The present chapter, therefore, will limit discussion of representational and virtual teams to the systems team development issues that are not treated by Connell (2002).

Systems Issues in Representational and Virtual Teams

Several issues arise that are specific to consultation work with representational or virtual teams. These include the following.

Multiple Membership Issues. Each member of a representational team (for example, cross-functional, leadership teams) has membership in at least one other team. In matrixed organizations, for instance, members of functional units

Table 2.2. An Integrated Model of Team Development.

Activities/goals	Team challenges
Launching/Forming	
<ul style="list-style-type: none"> • Given charter from team sponsor • Establishing team membership or criteria for membership • <i>Time boundaries and initial meeting times provided</i> • Clarification of purpose • Building commitment 	<ul style="list-style-type: none"> • Building interest, recruiting members • Coordinating schedules and priorities • Understanding charter
Storming	
<ul style="list-style-type: none"> • Common goals are clarified, forging a <i>team identity</i> • Team learns how to deal with negative feelings generated by competitive work style and personality differences • Team roles begin to emerge 	<ul style="list-style-type: none"> • Managing conflict • <i>Building consensus</i> • Developing dialogue • Valuing differences
Norming	
<ul style="list-style-type: none"> • Agreement on procedures for identifying tasks and resources and assigning subtasks • Experimentation with different ways of working together leading to role differentiation 	<ul style="list-style-type: none"> • Avoiding role lock or stereotyping • Finding the right balance between structure and procedure, and spontaneity and experimentation
Performing	
<ul style="list-style-type: none"> • More efforts to give positive feedback, support, humor, and spontaneity • Spontaneous innovation and creative thinking 	<ul style="list-style-type: none"> • Avoiding overconfidence—team feels superior and able to accomplish anything • Balancing creativity with practical limitations
Reviewing/Renewing/Adjourning	
<ul style="list-style-type: none"> • Facing realistic limitations of time, resources, and talents of the team members • Facing up to renewing its mission/charter or ending its existence • Group decides for itself what it can tolerate and accomplish, regardless of outside expectations 	<ul style="list-style-type: none"> • Facing realities and candidly reviewing progress • Performing without clear structure, norms, or roles • Becoming self-managing • Keeping from getting discouraged

Source: Adapted from Tuckman and Jensen, 1977; Beck 1981.

may also be members of several project teams. Leadership teams, special examples of representational teams, are comprised of the heads of the important business and functional units in the organization. In both cases, each member serves a linking function between teams that might have interdependent matrix or hierarchical relationships with each other.

Because most members of representational and leadership teams have dual team membership (for example, the cross-business unit and cross-functional/leadership team and the function/unit they represent), they frequently experience *split loyalties*. For instance, a decision that might be good for the larger organization might have a negative impact on their business unit or function. Furthermore, the amount of joint destiny is diluted by the fact that individual compensation is frequently more related to the performance of the business or functional unit they lead than to the overall performance of the larger organization (Lawler, 2000). Katzenbach (1998), in fact, believes that it is unreasonable to expect a high degree of collaboration and cooperation within leadership teams because of divided loyalties, conflicting executive priorities, changing marketplace demands, confounded accountabilities, and differences in stakeholder expectations.

Boundary Issues. Traditional collocated intact work teams have simplified boundary issues by having stable membership, common work and meeting space, the same time zone, and usually the same culture (although this has changed dramatically in the last fifteen years even in intact teams). Stable membership allows the team to go through team development stages together (for example, launching, forming, norming, storming, performing, and adjourning/renewing) and to be in similar biorhythms (it's everyone's morning, afternoon, and others). Meeting face-to-face allows for more efficient communication because members can see nonverbal as well as hear verbal behavior. *Stable membership over time also provides transactional experiences that allow members, formally or informally, to test assumptions and negotiate team-based rather than culturally based assumptions.*

Representational and virtual teams frequently cross or violate these boundaries, enormously complicating the goal of reaching high performance. Without stable membership, team member priorities are constantly changing, making it difficult to negotiate goals, leadership roles, and group norms. It also becomes difficult to surface and test the kinds of cultural assumptions that various team members, often identified only by voice or e-mail text, are making. The difficulty in identifying and testing cultural assumptions greatly amplifies the kind of dysfunctional basic assumption behaviors noted by Bion (1961), and can easily immobilize the team and significantly inhibit the development of collaboration, trust, interdependency, and, ultimately, creativity and productivity.

Communication Issues. The advent of new and radical communications media such as the Internet has allowed representational and virtual teams to span or at

least manage many of the boundaries just discussed. These technologies, however, can be as much of a burden as a boon. Though e-mail can be a very efficient method for communicating the content aspect of a message almost instantaneously across the globe, it is a notoriously bad medium for communicating the relationship aspect. To fill the relationship aspect void, socially savvy e-mail authors use analogic “emoticons” to convey their feelings and sentiments (Sanderson, Freeman, Niederst, & Dougherty, 1993)—for example, happiness is expressed as a smiley face lying on its side [(:-)].

Virtual versus Collocation Issues. Considerable research indicates that periodic face-to-face contact is necessary for virtual teams to develop into high-performance teams (Armstrong & Cole, 1995; McGrath & Hollinghead, 1994). Face-to-face time spent in complex social interactions is a requisite for team members to discern and test subtle cultural assumptions and personal agendas. These interactions enable team members to calibrate later cyber-messages from team members because they probably can recall nonverbal behavior associated with that person. Face-to-face time also greatly facilitates the negotiation of norms and roles, as well as the development of interpersonal trust based on an assessment of character and competency. A savvy virtual team leader will be sure to schedule lots of white space during face-to-face meetings to allow time for more personal and informal discussions.

Technology/Behavior Science Integration Issues. The potential for virtual teamwork is intimately related to the development and global spread of information technology. In many cases, however, the software engineers developing the technology for virtual teams are doing so with limited input and involvement from behavioral scientists and practitioners. The full potential of computer- and Internet-mediated technology for virtual teams will only be realized when software developers, programmers, and IT systems engineers team up with consulting psychologists and end-user populations to design new generations of groupware that can effectively guide distributed, cross-functional virtual team members through the entire life/goal attainment cycle in a cyberspace environment (Galegher, Kraut, & Egido, 1990). For example, as a result of this kind of collaboration, a complex set of nested processes can be designed that would enable teams to drill down to increasingly specific processes for dealing with virtually any challenging organizational issue—from specifying desired states to evaluating the results of a completely executed implementation plan.

Team Development in Representational and Virtual Teams

There is general agreement that the team development process described by Tuckman (Tuckman & Jensen, 1977) is also applicable to representational and virtual teams (Lipnack & Stamps, 1997; Duarte & Snyder, 1999). There is also a

consensus that the time required for representational and virtual teams to coalesce and become a cohesive, creative, and highly productive team is considerably greater than in more traditional, intact teams (Armstrong & Cole, 1995; Lipnack & Stamps, 1997).

Beck (1981) has estimated that collocated intact teams, which have far fewer boundaries to manage and negotiate, take an average of thirteen hours of face-to-face interaction to reach the performing stage of development. It is not surprising, therefore, that De Meyer (1991) and Galegher et al. (1990) were pessimistic that virtual teams could fully form without some degree of face-to-face contact. McGrath (1990), studying computer-mediated conferences, described the team process as chaotic without some face-to-face interaction, especially in the early phases of group formation and problem definition.

Though face-to-face interaction is clearly desirable, the cost of bringing representational and virtual teams together, especially from around the globe, is high. The timing and frequency of face-to-face team meetings are strategic decisions. Lipnack & Stamps (1997) noted the similarity of the Tuckman group development model (Tuckman & Jensen, 1977) and the typical project management cycle—launch, perform, test, and deliver (Lipnick & Stamps, 1993). By overlaying the Tuckman model with the project management cycle, these authors noted that periods of heightened tension, conflict, and team fragmentation occurred predictably during the launching/storming and reviewing/renewing/testing phases of the team's development.

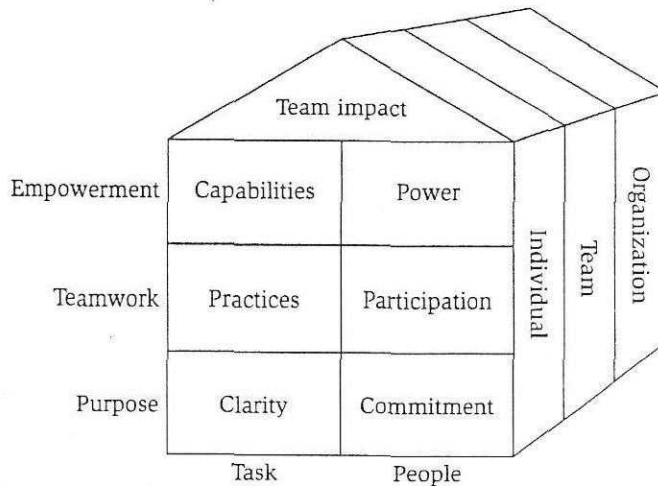
Representational and virtual teams require significant face-to-face time to get beyond basic information sharing to develop into highly performing teams. Teams will receive the greatest payoff from investment in time and money if team members are brought together for a significant period of time (two to three days) during the launching/storming and reviewing/renewing/testing phases of the team's life. By meeting together for several days when the team is initially launched, the team can get the interaction time that Beck (1981) indicates is necessary to successfully traverse the forming, storming, and norming phases. This groundwork is necessary to achieve the cohesiveness, focus, and collaboration required for the high creativity and productivity expected during the mature performing phase of the team's life cycle. Meeting again for several days just prior to delivery of the team's work products will allow team members to reengage with each other, realign themselves regarding mission and deliverables, and celebrate their accomplishments in preparation for adjournment or renewal/redirection.

Team Success Conditions

In addition to looking at team development over time, it is frequently useful to take a snapshot of a team's functioning at any given time. For this purpose, it is useful to identify the fundamental conditions necessary for team success.

Rawlings (2000) presents a six-factor model for team success (see Figure 2.2) based upon an extensive review of the team literature. Each of these six factors contributes to success at three organizational levels: (1) individual focus—each team member has the capability and commitment necessary to contribute to effective teamwork and performance; (2) team focus—the team has the capabilities and discipline necessary for developing positive teamwork and achieving high performance; and (3) organization focus—the organization and its leaders provide an environment that supports effective teamwork and high performance.

The importance of both task accomplishment and social system maintenance to the success and well-being of any group, team, or social system is a



Clarity—Clear understanding of its collective purpose and expectations

Commitment—Belief in the importance of the work and dedication to high performance

Practices—Use of effective processes, tools, and procedures to manage the work

Participation—Development of collaborative relationships to ensure full involvement and contribution

Capabilities—The right structure, essential competencies, and required resources to succeed

Power—The collective will and confidence needed to succeed despite obstacles

Figure 2.2 Six-Factor Success Model for Team Success.

Source: Copyright 1999 by Personnel Decisions International. Used by permission.

fundamental tenet of systems theory (Berrien, 1968). It should not be surprising, therefore, that both task and relationship factors are included in the team success conditions. This model expresses team success in terms of the interplay between the three required interdependent tasks of the team and the relationship between members. In order to be successful, the team must build: shared purpose and vision (clarity and commitment); teamwork that is characterized by efficient, collaborative work processes and a high degree of trust and participation (practices and participation); and empowerment that is characterized by the team having the structure, capabilities, and resources for collaboration, and the collective will and confidence in one another that the team will succeed (capabilities and power).

INTERVENTIONS WITH TEAMS

Several types of interventions are possible with groups, and in this section several approaches will be presented.

Team Building

It is generally assumed that team building is a solution for enhancing the performance of suboptimizing or dysfunctional teams of any kind or type. In this context, the purpose of team building is either corrective in nature or intended to enable suboptimizing teams to realize their potential (Dyer, 1995). For existing teams, the term *team development* seems most appropriate. Alternatively, the members of a new, start-up group—who are, at first, merely an aggregate of individuals—can be convened and trained in participative problem-solving and decision-making methods and processes to prepare them to begin their work. These interventions are properly called *team building* and are intended to enable new teams to climb the learning curve, or ramp up, so they can quickly begin to perform as expected.

Since the 1950s, the teams in question were primarily collocated intact work groups that were accountable for producing routine results by performing some well-known and frequently practiced set of tasks, activities, or functions to achieve a specific set of goals. Some were management teams whose members were responsible for the performance of various interdependent subsystems and intact work teams.

Now and in the future, we are likely to be challenged by the need to adapt our existing concepts, strategies, methods, and skills to deal with multidisciplinary, multifunctional, interdepartmental teams that meet and work sporadically as project teams in unstable face-to-face or virtual realities to achieve uncertain, ambiguous results using homemade strategies and methods.

assumption was that this deficit was due to the team members' lack of knowledge or skills. This was often based on informal, unsystematic assessments conducted by managers at a distance without the participation of team members. The interventions were multifaceted, corrective training experiences that were held at retreats (or advances) for three to five days, or spaced half- or full-day sessions on the client system's site ("so we don't completely neglect our routine responsibilities").

Several confounding phenomena became evident when team building interventions were based on the assumption that front-end-loaded or retreat-based training in team building would be as effective as technical skills training. First, not all of the specific concepts, methods, and skills that are taught in team building workshops are needed every day by the team. In fact, most of the palette of HP teamwork skill sets are relevant only on occasion; thus, by the time they are needed, participants often forget when and how to apply them effectively, so they are prematurely rejected (Freedman, 1963). A second confounding variable is that the organization's culture might mitigate against the use of unconventional, state-of-the-art theory, methods, philosophies, and values of building and maintaining HPTs in the real-life workplace (Mager & Pipe, 1997).

A third factor is that such training might enhance team members' insight and awareness of certain team issues, but does not necessarily enable team members to either develop proficiency, or identify when, where, and how to apply these skill set elements. A fourth confounding phenomenon is that training exercises, cases, and simulations are artificial and often abstract or unrelated to the team's actual difficulties in dealing with its goals, work methods, work processes, or results. To maximize the transfer of such training from the classroom to the workplace, CTs had to help team members connect their learning to their team's real-life world. They had to facilitate a theory building process after each training experience to distill and explicate the significant derived concepts, methods, and skills. They then had to assist team members to determine when, under what circumstances and in which situations, the learning experience's results might be properly applied. Thus, transfer of learning from classrooms to workplaces was a difficult and cumbersome three-step process.

Data-Based Interventions with Teams

An alternative approach insists on an independent assessment of the alignment between the teams' goals, work activities, teamwork processes, and actual results achieved—including what linkage and contextual factors might either enhance or obstruct desired team performance (for example, Dyer, 1995; Reddy, 1994; Schein, 1999). This is consistent with Lewin's dictum that no action should be undertaken without conducting relevant research and no research should be undertaken without taking action (Marrow, 1969). That

is, one of the first interventions in any team or intergroup intervention—subsequent to negotiating an initial, mutually acceptable consulting agreement—should be the valid, timely collection and analysis of empirical data. Ideally, data relevant to the team's behavior should also be collected at intervals during the team development process and at the end to evaluate the progress on the team's development goals.

Relevant data can be provided to teams by using standardized or empirical survey instruments, individual or group interviews, observation by process experts, or by technical expert inspection of team work products (Nadler, 1977). Survey research is the most researched data-based approach (for example, Likert, 1961; Fowler, 1993), and, therefore, needs little detailed discussion here.

360-Degree Feedback for the Team. This multirater, multilevel survey process provides data from a team's leader and members, sponsors, customers, suppliers, subordinates, senior managers, governmental regulators, and other relevant, significant stakeholders. The type of data collected generally measure fundamental dimensions of team functioning; for example, the team's understanding of the task, the team's commitment to the task, the level and quality of member involvement, the team's use of effective processes, tools, and procedures, the team's structure, competencies, and availability of needed resources, and the team's confidence and determination to succeed (for example, Personnel Decisions International, 2001).

Self-Assessment. Another approach is to conduct facilitated discussions with team leaders and members to identify relevant dimensions of their team's functioning (for example, Dyer, 1995; Reddy, 1994; Schein, 1999). Each resulting dimension can be converted into open-ended questionnaires using familiar behavioral indicators. For example:

- To what extent were your ideas and opinions solicited and valued by the other members of your team today?
- What was the quality of the decision(s) that your group made today?
- How committed do you feel to the final decision(s) that your team made today?

When numerical values (anchored by behavioral descriptors) are used, team members can share their perceptions and regularly post their average ratings in their meeting rooms. Posted data provide continuous, highly visible, meaningful performance indicators for team members to discuss and decide what, if anything, they are willing and able to do to improve their self-ratings.

Organizational Obstacles

Teams do not operate in a vacuum. They are parts of networks of interdependent subsystems, established by their positions within a complex business process or value-chain. Teams require mutual support and cooperation from their interdependent stakeholders.

In either collocated or distributed multifunctional teams, the represented subsystems (for example, departments, product groups, and regions) and their agent-representatives must also actively cooperate and communicate with each other. In the absence of transparency, many teams become suspicious, uncertain, and tentative. They withdraw within their own hardened boundaries and act as if they are under siege. Team members may try to cope by avoiding risks, performing only familiar tasks and activities. Thus, paraphrasing Einstein's definition of insanity, when perceiving external threats, they do what they have always done, hoping this will be sufficient to produce an adaptive response to the challenge of unprecedented circumstances.

Members of represented, cross-functional teams often complain that their back-home managers fail to specify their department's goals and priorities. Or, they haven't been given the resources they need to achieve their objectives. Or, they cannot cope with increasing daily pressure to perform when they also have to do the interdepartmental coordination work that their burnt-out, ineffective, or prematurely retired managers are supposed to do.

Thus, team leaders and members must also achieve proficiency in applying the concepts, methods, and process skills necessary to take the initiative in dealing with the *organizational obstacles* to enabled empowerment. This requires the team to scan both its internal and external environments to identify and track changing environmental variables (for example, shifting political, security, economical, social, governmental, and meteorological conditions) and their stakeholders' responses to these conditions. In periods of unprecedented, discontinuous change, subsystems and stakeholders often try to protect themselves or advance their own interests—often at the expense of the larger organization, and, by default, at the expense of the team.

THE FUTURE OF TEAMS, TEAMWORK, AND TEAM DEVELOPMENT

The evolution of team development theory and method has been relatively slow since the 1950s. However, two trends appear likely to have a huge impact on the research and practice of group and team development: fast cycle implementation and action learning.

Fast Cycle Implementation

A comprehensive understanding of group dynamics and the process of converting groups of individuals into HPTs cannot be fully appreciated without a deep appreciation for the contexts within which groups and teams exist (Gillette & McCollum, 1995; Hackman, 1990). Friedlander (1998) described major contextual shifts that have occurred over the past forty years in both the expectations of the consumers of consulting psychology and OD services, and the evolution in the nature of these services. These shifts might have been precipitated by the frequency and intensity of discontinuous, turbulent changes in the external environment.

A parallel shift seems to have occurred regarding the consumers' values. That is, client systems' agents increasingly expect consultants to understand their industry, finance-based strategic business decisions, and the need to accelerate the change process so as to minimize the amount of time it takes to do anything. Anderson's anthology (2000) describes a number of responses to the increasing demand for faster cycle time for diagnosis, design, and delivery of interventions—at the organizational, team (and intergroup), and individual levels. Speed is considered to be a distinctive competitive advantage in most post-industrial organizations. Simultaneously, all parties seem to increasingly understand the need to address the complex interdependencies across vertical organizational levels and lateral subsystem boundaries. The challenge is how to shorten consulting cycle time while optimizing the utility of the individual, team, intersubsystem, and organizational boundary management processes. The new mantra is, "Faster, better, cheaper."

Action Learning Teams

A second emerging trend is action learning approaches. Until recently, action learning (AL) has not received the recognition and utilization it deserves, although it was developed in 1945. According to Marquardt (1997), AL is an approach to leadership, team, and organizational change and development that utilizes action research (Lewin, 1947) by cross-functional teams composed of high-potential middle managers. AL capitalizes on the needs to deal with real-life organizational issues and be anchored in real-time, and is responsive to cycle time pressure. By paying attention to and learning from their unfolding experience, individual members of AL teams: (a) develop their leadership capabilities; (b) identify and solve real, meaningful organizational problems; (c) enable their organizations to learn how individuals, teams, and total systems can quickly grow and develop; (d) learn the requisite skills to build high performing teams in the future; and (e) gain high levels of self-awareness and self-esteem while (f) earning recognition, appreciation, and respect.

An AL initiative can evolve from either of two organizational needs. The first is the need to develop fully qualified succession candidates. The second is the need to develop employees who can deal creatively and adaptively with unprecedented issues in which there are only ambiguous goals and uncertain methods for creating solutions.

A Description of AL. AL works as follows: (a) high-potential individuals from all relevant parts and levels of the organization are selected to join a cadre of participants in an AL initiative; (b) the cadre receives an orientation and introduction to AL theory, strategy, and methods; (c) organizational leaders, serving as sponsors, identify critical, current, unprecedented, organization-wide issues that are to be addressed by AL teams; (d) critical issues are listed and communicated to the cadre along with deadlines for expected results; (e) the cadre is divided into four- to six-person AL teams, each of which is matched to one specific issue for which the team takes responsibility; (f) each AL team meets with its own AL coach (a process-oriented CT) to begin to scope out the issue, and to develop a strategy for studying, analyzing, developing recommendations, presenting recommendations to senior management, and implementing approved recommendations—all within the allocated time parameters; (g) each AL team works in both collocated and distributed modes, in that individual team members take on responsibilities for various tasks, and convene, sometimes in pairs or triads or as a total AL team, and often meet in cyberspace; (h) the AL coach meets with the AL team when they convene for face-to-face progress reviews, analysis, and emergent planning of next steps, when the coach focuses on *how* the team is working and may intervene—primarily by asking process-oriented questions—with the purpose of enabling team members to fully understand and deal with team process issues.

Action learning (Marquardt, 1999; Rothwell, 1999) is similar to Kurt Lewin's action research method (1947) and to the development of the NTL Institute's experiential T-Group (Bradford, Gibb, & Benne, 1964), andragogical learning (Knowles, 1988), double-loop learning (Argyris & Schön, 1992), and participative OD methodology (for example, Cummings & Worley, 2001). The simple elegance of the AL approach is integrating these elements in an innovative manner that yields powerful results. It is also apparent that AL contributes to the reduction in cycle time required to identify and manage unprecedented organizational problems that have no clear-cut ready-made solutions.

While AL has a long history, we believe it is quite likely that the creation and facilitation of AL teams will become increasingly important and recognized as the information age evolves, as an increasing amount of teamwork takes place in cyberspace, and as reduced cycle time becomes more of a competitive necessity than merely a competitive advantage.

SUMMARY

The second half of the twentieth century saw the emergence of the team as a dominant unit of organizational structure. In fact, in the last decade of the last century, teams and team-based organizations have taken on almost messianic reputations, and are being seen as the salvation for organizations in the information, post-industrial era. This chapter provides consulting psychologists with the current state of knowledge regarding teams. The shift from traditional, intact work teams to representational and virtual teams is discussed. We also discuss the relevant issues for team building interventions. Finally, we provide a look at the future of teams as we start the twenty-first century. In this discussion, new trends in team structures and dynamics made possible by the phenomenal advances in technology are presented. As a caution, the authors warn that introducing technology, no matter how great the potential, without consideration and involvement of the people and human systems that will use and be affected by the technology will lead to disappointing results. The barriers to high performance for representational, distributed, and virtual teams are, in many cases, higher than for more traditional, intact work teams.

References

- Allen, T. (1977). *Managing the flow of technology: Technology transfer and the dissemination of technological information within the R&D organization*. Cambridge, MA: MIT Press.
- Anderson, M. (2000). *Fast cycle organization development*. Cincinnati, OH: South-Western.
- Argyris, C., & Schön, D. A. (1992). *Theory and practice: Increasing professional effectiveness*. San Francisco: Jossey-Bass.
- Armstrong, D. J., & Cole, P. (1995). Managing distances and differences in geographically distributed work groups. In S. Jackson & M. Ruderman (Eds.), *Diversity in work teams* (pp. 187-215). Washington, DC: American Psychological Association.
- Bales, F. (1950). *Interaction process: A method for the study of small groups*. Reading, MA: Addison-Wesley.
- Barnlund, D. A. (1959). A comparative study of individual, majority, and group judgment. *Journal of Abnormal and Social Psychology*, 58, 55-60.
- Beck, A. P. (1981). The study of group phase development and emergent leadership. *Group*, 5, 48-54.
- Bennis, W. G., & Shepard, H. A. (1956). A theory of group development. *Human Relations*, 9, 415-457.
- Berrien, K. F. (1968). *General and social systems*. New Brunswick, NJ: Rutgers University Press.
- Bion, W. R. (1961). *Experiences in groups*. New York: Basic Books.
- Bradford, L. P., Gibb, J. R., & Benne, K. D. (Eds.). (1964). *T-Group theory and laboratory method: Innovation and re-education*. New York: Wiley.
- Connell, J. B. (2002). Organizational consulting to virtual teams. In R. L. Lowman (Ed.), *Handbook of organizational consulting psychology* (pp. 285-311). San Francisco: Jossey-Bass.
- Cummings, T. G., & Worley, C. G. (2001). *Organization development and change* (7th ed.). Cincinnati, OH: South-Western.

- De Meyer, A. (1991). Tech talk: How managers are stimulating global R&D communication. *Sloan Management Review*, 32, 49-58.
- Donnellon, A. (1996). *Team talk: The power of language in team dynamics*. Boston: Harvard Business School Press.
- Duarte, D. E., & Snyder, N. T. (1999). *Mastering virtual teams: Strategies, tools, and techniques that succeed*. San Francisco: Jossey-Bass.
- Dyer, W. G. (1995). *Team building: Current issues and new alternatives* (3rd ed.). Reading, MA: Addison-Wesley.
- Fowler, F. J., Jr. (1993). *Survey research methods* (2nd ed.) Thousand Oaks, CA: Sage.
- Freedman, A. M. (1963). *Changes in perceptions of on-the-job problems following human relations laboratory training*. Unpublished master's thesis, Boston University, College of Business Administration.
- Freedman, A. M. (2000). Multigroup representation: Representative teams and teams of representatives. *Consulting Psychology Journal*, 52, 63-81.
- Friedlander, F. (1998). The evolution of organization development: 1960s to 1990s. *Vision/Action*, 17(1), 10-12.
- Fuqua, D. R., & Newman, J. L. (2002). The role of systems theory in consulting psychology. In R. L. Lowman (Ed.), *Handbook of organizational consulting psychology* (pp. 76-105). San Francisco: Jossey-Bass.
- Galbraith, J. R. (1973). *Designing complex organizations*. Reading, MA: Addison-Wesley.
- Galegher, J., Kraut, R. E., & Egidio, C. (Eds.). (1990). *Intellectual teamwork: Social and technological foundations of cooperative work*. Hillsdale, NJ: Erlbaum.
- Gillette, J., & McCollum, M. (1995). *Groups in context: A new perspective on group dynamics*. Lanham, MD: University Press of America.
- Hackman, J. R. (Ed.). (1990). *Groups that work (and those that don't): Creating conditions for effective teamwork*. San Francisco: Jossey-Bass.
- Hall, E. T. (1976). *Beyond culture*. New York: Anchor Books.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. New York: McGraw-Hill.
- Husband, R. (1940). Cooperative versus solitary problem solution. *Journal of Social Psychology*, 11, 405-409.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed.). New York: Wiley.
- Katzenbach, J. R. (1998). *Teams at the top: Unleashing the potential of both teams and individual leaders*. Boston: McKinsey.
- Katzenbach, J. R., & Smith, D. K. (1993). *The wisdom of teams: Creating the high performance organization*. New York: HarperCollins.
- Keidel, R. W. (1984). Baseball, football, basketball: Models for business. *Organizational Dynamics*, 12, 5-18.
- Knowles, M. (1988). *The adult learner: A neglected species* (3rd ed.). Houston: Gulf.
- Koestler, A. (1967). *The ghost in the machine*. London: Hutchinson & Co.
- Kraut, R. E., Egidio, C., & Galegher, J. (1990). Patterns of contact and communication in scientific collaborations. In J. Galegher, R. E. Kraut, & C. Egidio (Eds.), *Intellectual teamwork: Social and technological foundations of cooperative work* (pp. 149-171). Hillsdale, NJ: Erlbaum.
- Lane, I., Mathews, P., Chancy, C., Effmeyer, R., Reher, R., & Teddlie, C. (1982). Making the goals of acceptance and quality explicit: Effects on group decision. *Small Group Behavior*, 13, 542-554.

- Lawler, E. E., III (2000). *Rewarding excellence: Pay strategies for the new economy*. San Francisco: Jossey-Bass.
- Le Bon, G. (1960). *The crowd*. New York: Norton. (Originally published 1895.)
- Leonard, H. S., & Freedman, A. M. (2000). From scientific management through fun and games to high performing teams: An historical perspective on consulting to team-based organizations. *Consulting Psychology Journal: Practice and Theory*, 52, 3-19.
- Lewin, K. (1947). Group decision and social change. In E. Maccoby, T. Newcomb, & E. Hartley, (Eds.), *Readings in social psychology* (pp. 197-211). Austin, TX: Holt, Rinehart and Winston.
- Likert, R. (1961). *New patterns of management*. New York: McGraw-Hill.
- Lipnack, J., & Stamps, J. (1993). *The teamnet factor: Bringing the power of boundary crossing into the heart of your organization*. New York: Wiley.
- Lipnack, J., & Stamps, J. (1997). *Virtual teams: Reaching across space, time, and organizational technology*. New York: Wiley.
- Mager, R. F., & Pipe, P. (1997). *Analyzing performance problems or you really oughta wanna: How to figure out why people aren't doing what they should be, and what to do about it* (3rd ed.). Atlanta, GA: Center For Effective Performance.
- Maier, N. (1970). *Problem solving and creativity in individuals and groups*. Pacific Grove, CA: Brooks/Cole.
- Mann, R. (1966). The development of the member-trainer relationship in self-analytic groups. *Human Relations*, 19, 85-115.
- Marquardt, M. J. (1999). *Action learning in action: Transforming problems and people for world-class organizational learning*. Palo Alto, CA: Davies-Black.
- Marquart, D. (1955). Group problem solving. *Journal of Social Psychology*, 41, 103-113.
- Marrow, A. J. (1969). *The practical theorist: The life and work of Kurt Lewin*. New York: Basic Books.
- McFarland, G. K., Leonard, H. S., & Morris, M. M. (1984). *Nursing leadership and management: Contemporary strategies*. New York: Wiley.
- McGrath, J. (1990). Time matters in groups. In J. Galegher, R. E. Kraut, & C. Egido, (Eds.), *Intellectual teamwork: Social and technological foundations of cooperative work* (pp. 23-62). Hillsdale, NJ: Erlbaum.
- McGrath, J., & Hollinghead, A. (1994). *Groups interacting with technology*. Thousand Oaks, CA: Sage.
- Mills, R. (1964). *Group transformation: An analysis of a learning group*. Englewood Cliffs, NJ: Prentice Hall.
- Mohrman, S. A., Cohen, S. G., & Mohrman, A. M., Jr. (1995). *Designing team-based organizations: New forms for knowledge work*. San Francisco: Jossey-Bass.
- Nadler, D. A. (1977). *Feedback and organization development: Using data-based methods*. Reading, MA: Addison-Wesley.
- Personnel Decisions International (2001). *PROFILOR for Teams*. Minneapolis, MN: Author.
- Rawlings, D. (2000). Collaborative leadership teams: Oxymoron or new paradigm? *Consulting Psychology Journal: Practice and Theory*, 52, 36-48.
- Reddy, W. B. (1994). *Intervention skills: Process consultation for small groups and teams*. San Diego, CA: Pfeiffer.
- Reich, R. B. (1987). Entrepreneurship reconsidered: The team as hero. *Harvard Business Review*, 3, 77-83.
- Rothwell, W. J. (1999). *The action learning guidebook: A real-time strategy for problem-solving, training design, and employee development*. San Francisco: Jossey-Bass.

- Sanderson, D., Freeman, E., Niederst, J., & Dougherty, D. (1993). *Smileys*. Sebastopol, CA: O'Reilly & Assoc.
- Schein, E. H. (1992). *Organizational culture and leadership: A dynamic view* (2nd ed.). San Francisco: Jossey-Bass.
- Schein, E. H. (1999). *Process consultation revisited: Building the helping relationship*. Reading, MA: Addison-Wesley.
- Shepard, H. A. (1964). Exploration on observant participation. In A. P. Bradford, J. R. Gibb, & K. D. Benne (Eds.), *T-group theory and laboratory method: Innovation and re-education* (pp. 370-395). New York: Wiley.
- Slater, P. (1966). *Microcosm*. New York: Wiley.
- Taylor, D., & Faust, W. (1952). Twenty questions: Efficiency of problem solving as a function of the size of the group. *Journal of Experimental Psychology*, 44, 360-363.
- Trompenaars, F. (1994). *Riding the waves of culture: Understanding diversity in global business*. Burr Ridge, IL: Irwin.
- Tuckman, B. W., & Jensen, M.A.C. (1977). Stages of small group development revisited. *Group and Organizational Studies*, 2, 419-427.
- Vaill, P. (1989). *Managing as a performing art: New ideas for a world of chaotic change*. San Francisco: Jossey-Bass.
- Von Bertalanffy, L. (1968). *General systems theory: Foundations, development, applications*. New York: Braziller.
- Watzlawick, P., Beavin, J., & Jackson, D. (1967). *Pragmatics of human communications: A study of interaction patterns, pathologies, and paradoxes*. New York: Norton.