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2

A Look at Groups From the Functional Perspective

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Abstract

This chapter discusses theory and research on small groups from the functional perspective. We define, present the underlying theoretical assumptions of, and review seven representative areas of research from the functional perspective. The seven areas include group decision-making, social combination approach, groupthink, collective information sharing, group brainstorming, conflict management, and an external view of groups. Our review of research from the functional perspective also covers how group composition, projects, structures, and ecology affect group interactions and outcomes. The functional perspective is strong in predicting and explaining task-oriented group performance but is more limited in predicting and explaining the

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behavior of groups with socioemotional or multiple goals outside normative boundaries. We present other debates and challenges to the functional perspective and suggest future research directions.

Most people who have worked in groups can say that some of their groups functioned better than others. They can identify which groups created outstanding products, better than expected initially, and which groups performed much worse than expected, given group members' individual skills and abilities. They can also distinguish between groups that worked well together and those that did not (Hackman, 1990). Scholars who study groups from the functional perspective aim to understand the factors and processes that help and hurt the quality of group performance.[1]

The Functional Perspective Defined

Which leadership styles facilitate good group decision-making? What group size is ideal for creative idea generation? How does the manner in which team members communicate and manage conflict affect their productivity? The answers to these and other questions regarding group task performance lie at the heart of the functional perspective. The functional perspective is defined as a normative approach to describing and predicting group behavior and performance that focuses on the functions of inputs and/or processes.

Most theory and research pertaining to group performance effectiveness has used the lens of the functional perspective. Four core assumptions define the functional perspective: (1) groups are goal oriented; (2) group behavior and performance varies in quality and quantity and can be evaluated; (3) interaction processes have utility and can be regulated; (4) internal and external factors influence group behavior and performance via interaction. Each assumption is described below in more detail.

1. Groups are goal oriented. According to the functional perspective, groups have one or more goals. These goals may be social-emotional (e.g., to provide support to members), group oriented (e.g., to obtain resources for the group to continue), or task oriented (e.g., to produce a product, idea, or decision) (cf. Cartwright & Zander, 1968; McGrath, 1991). Much of the research from the functional perspective has focused on the effective

accomplishment of task-oriented goals. Task-oriented goals include production in the cognitive realm (reaching a good group decision, generating creative ideas, solving a problem, remembering information) or physical world (building widgets, performing a song). Although groups may hold other goals related to their task (e.g., to get along well, to maintain the prestige of the group, to keep meetings short), the functional perspective largely focuses on groups' ability to satisfy a primary group task goal.

2. Group behavior and performance varies and can be evaluated. The functional perspective assumes that group performance is evaluated by some standard. That standard could be how well the group reaches its goals, but it is often how effectively or efficiently the group performs a task-related goal. When group performance falls short of this normative standard, interventions are generated to help groups reach their potential. Most of these interventions involve tinkering with the interaction process and are described in the next section.

3. Interaction processes have utility and can be regulated. The functional perspective prescribes that certain interaction processes are more useful to groups for achieving their goals than others and that interaction processes can be controlled and regulated. Theories that fit into the functional perspective suggest that certain actions or activities are required of groups during their interaction for successful goal attainment. The functions of required actions or activities can be procedural or rhetorical and can include information processing, conflict management, or even the development of a group culture (Hirokawa & Poole, 1996). When the goal is task oriented, such as making a good decision, the requisite actions or activities are often based on a rational model (e.g., members should communicate and optimally weigh all task-relevant information) (Hirokawa, 1985).

To increase the likelihood that groups will meet their goals, functionalists often design interventions to control and regulate interaction, interventions that make the desired pattern of actions and activities during group interaction more likely. These interventions may include the development of procedural rules (such as brainstorming instructions), communication technologies (such as a feature that provides anonymity to members), or restructuring of the group's task (having groups rank-order alternatives rather than choose the best one).

4. Internal and external factors influence group performance via interaction. According to the functional perspective, factors emanating from within the group (e.g., member composition, group size) and external

Table 2.1 The Functional Perspective

Definition of perspective	A normative approach to describing and predicting group performance that focuses on the functions of inputs and/or processes
Key assumptions	• Groups are goal oriented • Group performance is evaluated • Interaction processes have utility and can be regulated • Internal and external factors influence group performance via interaction
Types of groups	Task-performing groups
Key theories	Functional theory, groupthink, social decision scheme theory, collective information sampling theory, transactive memory, goal setting
Dominant research methodologies	Primarily laboratory experiments, with a few exceptions
Strengths	• Ability to predict and explain group performance via static inputs and processes • Empirical base for the development of interventions to improve group performance
Weaknesses	• Does not address groups that have a socioemotional purpose • Difficulty in defining and measuring "effective" performance • Task-performing groups may have goals other than effective performance • Cannot detect or explain nonlinear processes

circumstances (e.g., outside threat, time pressure) affect how the group performs. Thus, group performance is a causal outcome of these internal and external inputs. But that is not a simple, isomorphic translation. A given input can lead to many different outcomes; likewise, one outcome can be produced by many different inputs. Moreover, inputs may interact with each other to produce a group outcome. The input-output relation is mediated by processes that occur during group interaction (e.g., communication patterns, conflict management). These interaction processes influence group outcomes causally. Thus, the functional perspective assumes a sequential, causal string: Input factors influence interaction processes, which influence group performance outcomes. See Table 2.1.

Research Areas in the Functional Perspective

Functionalist thinking extends far back in the intellectual history of both psychology and sociology and remains influential in both fields today. William James, John Dewey, Robert Merton, and Talcott Parsons were among the early social scientists responsible for developing and advancing functionalist approaches for explaining and prescribing behavior in individuals and in society.

The functional perspective has been very influential and has guided much, if not most, of small group research. This body of research has explored many topics and has been conducted by researchers from many disciplines. In this section, we show how seven central areas that span topics in classic and contemporary group performance and decision-making group research have been approached from the functional perspective. These seven central areas include: the functional theory of group decision-making, the social combination approach to group decision-making, groupthink, collective information sharing, group brainstorming, conflict management, and an external view of groups.

These seven topics represent research from a variety of disciplines including communication, psychology, organizational behavior, political science, and sociology. They also reflect the areas of expertise of the coauthors. In each section, we provide a brief historical overview, show how that area encompasses the key assumptions of the functional perspective previously identified, and discuss several key findings in some detail. It is important to note that the seven topics described here are meant to be representative and are not an exhaustive set of topics that has been investigated through the functional perspective. For example, one topic that is glaringly missing is the functional perspective of leadership, one of the oldest and longest-standing lines of group research. See Bass (1990) for an excellent summary of this work and Hackman (2002) for a current take on it.

The Functional Theory of Group Decision-Making

The question of why some groups arrive at better decisions than others has long been of interest to group and organizational scholars in a variety of academic disciplines. Efforts to address this question have led to the widely held view that variations in the quality of group decisions can, in many cases, be attributed to the quality of interaction, or communication, that precedes choice making in the group (e.g., Collins & Guetzkow, 1964; Hackman & Morris, 1975; Hirokawa, 1982; Janis & Mann, 1977; McGrath, 1984; Roby & Lanzetta, 1958).

According to some scholars (e.g., Cragan & Wright, 1990; Griffin, 2000; Pavitt, 1994), one of the most influential theories accounting for the relation between communication and group decision-making effectiveness is the functional theory of group decision-making (Gouran & Hirokawa, 1983, 1986, 1996; Gouran, Hirokawa, Julian, & Leatham, 1993; Hirokawa, 1980a, 1980b, 1982, 1983, 1985, 1988; Hirokawa & Rost, 1992; Hirokawa & Scheerhorn, 1986). As the name implies, this theory models group decision-making, using the functional perspective. The core notion of the functional theory is that effective group decision-making is contingent on interactions contributing to the satisfaction of critical task requirements.

Over the years, the functional theory of group decision-making effectiveness has undergone change, with slight variations in the proposed critical functions necessary to reach an effective decision. In general, however, empirical tests of the functional theory have usually focused on the relations between group decision-making effectiveness (performance) and a group's ability to satisfy five requisite functions during its decision-making interaction (Hirokawa, 1999). The communication functions include:

1. Developing a thorough and accurate understanding of the problem. Given the information available to it, the group needs to arrive at an accurate (i.e., reasonable) understanding of (1) the nature of the problem, (2) the extent and seriousness of the problem, (3) the likely cause(s) of the problem, and (4) the possible consequences of not dealing effectively with the problem.
2. Achieving an appropriate understanding of the requirements for an acceptable choice. The group must recognize the specific standards that the choice must satisfy to be judged acceptable by evaluators of that decision.
3. Marshaling and, if necessary, developing a range of realistic and acceptable alternatives. The group must generate, or be aware of, a number of appropriate and feasible alternatives among which an acceptable choice is assumed to exist.
4. Assessing thoroughly and accurately the positive consequences associated with alternative choices. Given the information available to it, the group needs to be fully cognizant of the relative merits of all available choices.
5. Assessing thoroughly and accurately the negative consequences associated with alternative choices. Given the information available to it, the group needs to be fully cognizant of the relative disadvantages associated with each alternative.

Empirical tests have yielded general support for the functional theory of group decision-making effectiveness. However, comparisons of findings across studies indicate that group decision-making performance is inconsistently related to requisite functions. Methodological limitations notwithstanding,

the cross-study variability of empirical support for the functional theory has raised the issue of whether contingency variables affect the performance of the five critical communication functions. The one contingency variable that has attracted most attention is the nature of the task. Hirokawa (1990) asserted that when the task is complex (e.g., having unclear goals or barriers to effective performance), a group would have a greater need for problem analysis, procedural orientation, and planning. In other words, finding solutions to simple problems does not require the kind of communicative interdependence necessitated by complex tasks.

A recent meta-analysis of empirical research testing the functional theory showed that group members' assessment of negative consequences of various alternative solutions was the most important communication function (Orlitzky & Hirokawa, 2001). This finding supports Janis's (1982) emphasis on the necessity of critical evaluators in a group. Arguments for the benefits of devil's advocacy and dialectical inquiry in small group decision-making have been in a similar vein (Valacich & Schwenk, 1995). However, recent data indicates that it can actually be hazardous to assign a devil's advocate in a group (Nemeth, Brown, & Rogers, 2001). Genuine diversity tends to bring out the best performance; staged diversity brings out a smug attitude of having discussed issues that can lead to worse outcomes than doing nothing. The effect of this communication function seems to be moderated by whether the task is equivocal. Assessment of negative consequences seems more important for equivocal tasks (i.e., multiple acceptable choices; nonobvious criteria; correct choice is difficult to establish) than for unequivocal tasks.

In sum, the functional theory predicts that the effects of communication functions on group decision quality are moderated by task features (e.g., how equivocal or complex the task). The influence of input variables (e.g., group composition) on communication functions and subsequent group performance depends largely on the nature of the group's task.

A Social Combination View of Group Decision-Making

The goals of the social combination approach are to predict or to explain how group members combine their individual preferences into a single group response for a given type of task. Baron, Kerr, and Miller (1992) made an important distinction between the social combination and social communication approaches to group decision-making. The social communication approach "assumes that the best way to analyze how a group reaches its decision is to listen to what the group members say to one another" (p. 93). The question of interest is who says what to whom in what situations with what effect. The functional theory of group decision-making previously

described is an example of a social communication approach. In contrast, for the social combination approach, the basic unit of analysis is not a spoken thought or argument but rather the actual pre-meeting preferences of the group members (Baron et al., p. 94). The fundamental assumption is that group interaction may be modeled as a mapping process from members' preferences to a single collective decision.

The study of group task performance from the social combination approach demonstrates all of the assumptions of the functional perspective. Although the social combination approach has been used for predicting or describing how groups combine their individual preferences into a single group response for a given type of task, it could also be used for prescribing the best way to do that. The social combination approach assumes that groups are goal oriented and that their goal is to reach consensus on the best alternative. It also assumes that some group choices are better than others and that performance standards vary depending on properties of the group task. This approach also assumes that group discussion is the means by which group members combine their preferences into a single group response. It represents an input-process-output approach to studying group performance. (For discussions of the social decision scheme theory, formal methods, and applications to various group decision tasks, see Davis, 1973, 1980, and 1982.)

Social combination models, also called social decision schemes, formalize the processes by which a group maps a distribution of member preferences (e.g., the number of jurors who believe the defendant is guilty and not guilty before group discussion) into a collective group decision (the jury's verdict). Laughlin and Hollingshead (1995) postulated five ways that group members can resolve disagreement to reach consensus on a collective group response: voting, turn taking, demonstration, random selection, and generation of a new alternative.

Each of these ways of resolving disagreement can be represented probabilistically by a different social combination model. For example, voting can be represented as a majority-wins model. Turn taking can be represented as a proportionality process that assigns a probability to each alternative in proportion to the number of its advocates. Demonstration can be represented as a truth-wins or truth-supported-wins model (cf. Lorge & Solomon, 1955). Random assignment can be represented by a model that assigns equal probability to any alternative advocated by at least one group member. Different social combination models can be tested by comparing the actual proportion of groups selecting each alternative to the expected proportion for each social combination model. These analyses take into account the observed distributions of individual preferences across the set of alternatives.

One major finding discovered by researchers using the social combination approach is that groups rarely consider alternatives that are not advocated by at least one member prior to the group discussion (cf. Hollingshead, 1996b; Laughlin, 1999). Another is that group processes vary depending on the nature of the task (Davis, 1982; Laughlin, 1980). Cooperative group tasks may be ordered on a continuum anchored by intellective and judgmental tasks (Laughlin, 1980). Intellective tasks are problems or decisions for which there exists a demonstrably correct response within a verbal or quantitative conceptual system (Laughlin & Ellis, 1986). The objective for the group is to determine the correct answer; the criterion of success is whether the correct response is adopted. Truth-wins or truth-supported-wins models best predict the probability that the group will select the correct answer for intellective tasks. Judgmental tasks are evaluative, behavioral, or aesthetic judgments for which there is no demonstrably correct solution. For these tasks, the group objective is to achieve consensus; the criterion of group success is whether consensus is reached. Majority or plurality models best predict the probability of the group choice for judgmental tasks.

This approach has been applied to many group tasks including jury decisions (Davis, Kameda, Parks, Stasson, & Zimmerman, 1989), group memory performance (Hinsz, 1990), mathematical problems (Laughlin & Ellis, 1986), collective induction (Laughlin, 1988), and group decision-making (Stasser & Titus, 1985). This approach greatly influenced group research conducted by social psychologists in the 1970s, 1980s, and 1990s due to its great predictive and explanatory power.

Groupthink

The literature on groupthink is another example of research coming from the functional perspective on groups. Groupthink is a collective striving for unanimity that supersedes group members' efforts for thorough information processing (Janis, 1972, 1982). Because groupthink promotes quick compromises and avoidance of disagreements in group decision-making, this consensus-seeking tendency leads to an incomplete survey of alternative courses of action, poor information search, selective bias in processing information, and failure to evaluate alternatives realistically. Groupthink takes place when the group is highly cohesive, is insulated from other influences outside the group boundary, and is in highly stressful situations (e.g., competitive environment, time constraints).

Janis's (1972, 1982) groupthink model makes all of the assumptions implicit in functional research. First, it assumes groups are goal oriented. Each of the political and business decision-making groups Janis (e.g., 1982,

1985, 1989) studied had clear policy and public relations goals. For example, the Nixon White House wanted to contain any information about the Watergate break-in, and the Kennedy Executive Committee wanted to initiate a popular revolution to overthrow the Castro regime in Cuba.

Janis's (1989) work also provided a clear normative standard by which to judge groups and their interaction processes. Janis called this "vigilant decision making," which included (a) carefully surveying the range of objectives the groups wants to achieve, (b) carefully reviewing and formulating action alternatives, (c) rigorously searching for information bearing on the likely consequences of each alternative, (d) analyzing incoming information bearing on the likely consequences of each alternative, (e) analyzing incoming information dispassionately and thoughtfully, (f) reconsidering once-rejected action alternatives when new information comes to light, (g) confronting trade-offs that arise as a result of the conflicting costs and preferred options, and (h) making the effort to complete detailed contingency plans to be enacted should key assumptions underlying the preferred plan fail to hold. Specific advice for leaders includes accepting criticism and providing impartial leadership. Janis specifically argued that groups ought to be evaluated by this standard. He directly tested and confirmed this notion by comparing the number of vigilance aspects characterizing the group with an historical evaluation of its success (Herek, Janis, & Huth, 1987).

Third, Janis's groupthink work clearly implicates group process as the primary mechanism by which good and bad outcomes are reached. To illustrate this point, groupthink occurs when group cohesiveness and a provocative situational context work together such that the members like each other and want to draw social support from one another in the highly stressful situation. Groupthink teams place such a high priority on supporting each other emotionally that they choose not to challenge one another (i.e., concurrence seeking). This lack of rigorous information search leads to poor-quality information processing and a high probability that outcomes will not meet goals. In short, the group process of drive for consensus is the primary group process mechanism by which outcomes occur. (For a review of the groupthink literature and alternative explanations for the phenomenon, see the February/March 1998 issues of *Organizational Behavior and Human Decision Processes,* which take a retrospective look at groupthink theory and research over 25 years.)

Collective Information Sharing

In 1985, Stasser and Titus published the first paper that examined collective information sharing in groups. This study initiated research designed to understand how group members share information during discussion and

how such information pooling affects group decisions. The discussion bias revealed by this research shows that decision-making groups tend to discuss shared information that is commonly known by all members more than unshared information that is known by a single member (see Stasser, 1999; Wittenbaum & Stasser, 1996, for reviews). Failure to discuss unshared information can affect the quality of group decisions when the information is distributed among members as a hidden profile (e.g., Stasser & Stewart, 1992). In a hidden profile distribution, information supporting a less desirable decision alternative is largely shared, whereas information supporting the optimal decision alternative is predominantly unshared. Thus, members must communicate their unshared information to discover the best option.

The study of collective information sharing has exemplified all of the assumptions of the functional perspective on groups. First, all groups studied in this tradition have been given the explicit goal of reaching a good group decision. In most cases, groups are led to believe that one of the decision alternatives is the best. For example, groups have been instructed to choose the one suspect among three who is guilty of murder (e.g., Stasser & Stewart, 1992), select the best candidate for a job or political position (e.g., Stasser & Titus, 1987), identify the correct diagnosis for hypothetical medical cases (e.g., Larson, Christensen, Abbott, & Franz, 1996), select the best company for investment (e.g., Hollingshead, 1996b), or choose the best drug to market (Kelly & Karau, 1999). In rare cases, and as a goal manipulation, researchers have instructed groups to select a preferred decision alternative, given that information was insufficient for identifying a correct solution (e.g., Stewart & Stasser, 1998). In all studies, groups were given a clear task goal to reach a decision that was either optimal or preferred.

Second, collective information sharing and subsequent group performance has been evaluated in comparison to a normative standard of achievement. A benefit of group decision-making, as compared to individual decision making, is that group members can make a more informed decision collectively by pooling their unique information. Thus, mentioning unshared information and emphasizing it during discussion (e.g., through repetition) is considered to be evidence of good performance. When members neglect unshared information in favor of shared information, they are viewed as not pooling information effectively. When information is distributed among members as a hidden profile, failure to disseminate unshared information can result in the group choosing a less desirable decision alternative. In this case, successful performance results when group members communicate their unshared information in sufficient quantities to identify and choose the best option (Winquist & Larson, 1998).

Third, much of the collective information-sharing research has attempted to uncover conditions that facilitate unshared information use and thus the discovery of the optimal option in a hidden profile. Various inputs that originate from within the group (e.g., leadership, member status, expertise) have been shown to influence information sharing. For example, leaders (Larson et al., 1996), high-status members (Wittenbaum, 2000), and experts (Stasser, Stewart, & Wittenbaum, 1995) communicate unshared information to a greater extent than nonleaders, low-status members, and nonexperts. Some internal inputs (expertise, member acquaintance, task demonstrability) affect the quality of group decisions in a hidden profile because of the mediating role of information sharing. For example, when members know one another's expert roles (Stasser et al., 1995), are personally acquainted with one another (Gruenfeld, Mannix, Williams, & Neale, 1996), and think the task is solvable (Stasser & Stewart, 1992), they are more likely to discuss unshared information and thus discover the correct option in a hidden profile. One study showed that when groups have a norm to be critical, they are more likely to put a positive value on unshared information and thus correctly solve the hidden profile (Postmes, Spears, & Cihangir, 2001). Thus, both discussing and positively evaluating unshared information are critical processes that influence group decision quality.

In one of the few studies to examine the impact of external inputs on collective information sharing and decision making, Kelly and Karau (1999) found that the effect of members' initial preferences on their ability to solve a hidden profile depended on the amount of time pressure imposed on the group. This study illustrates that both internal (e.g., initial preferences) and external (e.g., time pressure) inputs, either independently or in combination, affect the quality of group decisions.

Group Brainstorming

The group brainstorming literature is concerned with the goals of generating as many ideas as possible. In fact, the procedures suggested by Osborn (1953) were designed to "liberate" groups to be highly productive. The brainstorming rules do lead to an increase in the number of ideas generated. However, contrary to Osborn's expectations, brainstorming groups were found to be less productive than similar-size sets of individuals (Diehl & Stroebe, 1987). Quality of ideas is not an explicit goal of brainstorming, but it is presumed that generation of a larger number of ideas will also lead to more good ideas. This is in fact the case, although the proportion of good ideas does not seem to change (Paulus, Larey, & Dzindolet, 2000). Interestingly, when groups are given a quality goal, this actually reduces productivity (Bartis, Szymanski, & Harkins, 1988).

One goal of groups may be satisfaction. Groups and teams seem to have positive perceptions of their productivity (Paulus, Larey, & Ortega, 1995). However, these positive perceptions are often inconsistent with the actual performance of groups (Paulus, Dzindolet, Poletes, & Camacho, 1993). In other words, groups may have an illusion of productivity.

A major concern in the brainstorming literature has been the evaluation of group performance or productivity relative to nominal groups (the total performance scores of a similar number of individuals performing alone). Face-to-face brainstorming groups perform worse than nominal groups (Paulus, 2000). When groups exchange ideas by means of writing or computer technology, groups may actually generate more ideas than comparable nominal groups (Pinsonneault, Barki, Gallupe, & Hoppen, 1999). Group size seems to be negatively correlated with idea generation in face-to-face groups (e.g., Mullen, Johnson, & Salas, 1991) and positively correlated with idea generation in computer groups (Valacich, Dennis, & Connolly, 1994).

Much of the literature on group brainstorming has been concerned with factors that inhibit or facilitate idea sharing in groups (Paulus, Dugosh, Dzindolet, Coskun, & Putman, in press). Among the reasons cited for this production loss are production blocking or interference, social loafing, and social anxiety (Diehl & Stroebe, 1987). Each of these factors may combine with others to produce low performance norms and a tendency to use low performers as a point of reference (Camacho & Paulus, 1995). However, if groups have trained facilitators who try to counteract some of the tendencies of groups, it may be possible for them to perform at the level of nominal groups (Kramer, Fleming, & Mannis, 2001).

Recent studies have been concerned with social and cognitive factors that can actually produce group synergy (higher performance than nominal groups). Presumably, if groups elicit competitive feelings and a concern with high levels of performance, upward comparison processes could occur (Paulus, Larey, Putman, Leggett, & Roland, 1996). In other words the groups will be motivated toward self-improvement. Exposure to productive models may be one way to achieve this aim (Kramer et al., 2001). Intergroup competition can also enhance performance of brainstorming groups (Coskun, 2000).

Several models have been developed to describe the cognitive processes that occur in brainstorming groups (Dugosh, Paulus, Roland, & Yang, 2000; Nijstad, Diehl, & Stroebe, in press; Paulus et al., in press). It is assumed that exposure to others' ideas will enhance the association processes conducive to ideational creativity. That is, discussing ideas with others should increase the number of ideas, the range of idea categories, and the quality of ideas

(Larey & Paulus, 1999). However, it is important that group members be able to process the ideas of others. For example, providing brief breaks throughout the brainstorming session to reflect on the shared ideas, structuring the idea-sharing process by focusing on one aspect of the problem at a time, and alternating individual and group brainstorming are some techniques that appear to be helpful (Paulus, in press). Idea sharing should be most helpful if the group members have knowledge sets that are complementary (Diehl & Stroebe, 1987). However, the emotional conflicts that may occur in diverse groups and difficulty in understanding one another's ideas may limit the benefits of cognitive diversity (Milliken, Bartel, & Kurtzberg, 2003).

Team Conflict Management

The discussion about the association between group conflict and outcomes has taken shape over nearly 50 years, dating back to Guetzkow and Gyr (1954). In this discussion, the experience of relationship or emotional conflict has long been associated with poor group performance (e.g., Deutsch, 1969). The experience of task conflict has often but not always been associated with improved group performance (e.g., Hoffman & Maier, 1961). (See Pruitt and Carnevale, 1993, for a review of this earlier research.)

Research on conflict in groups and teams is often based on social-psychological theory regarding group activity, member interaction, and social processes (e.g., communication, trust building). This perspective, however, often ignores the task environment and the focus on problem solving and task performance that the functional perspective takes into account in predicting group activity and outcomes. In fact, social psychology has moved away from anything "social" and into the realm of individual cognition, often ignoring the interaction processes of individuals in a group setting. This is also the direction one aspect of conflict management—negotiation research—has followed (with a few exceptions; see Weingart and Jehn, 2000, for a review).

Given the task performance and outcome evaluation focus of the functional perspective, much research and theorizing in the conflict arena have focused on organizational groups and teams. It is assumed that these work groups are goal oriented and that members, while also having individual goals (i.e., wages, satisfaction), have a common group goal. From a conflict-management perspective, social interaction inherently leads to conflict, even in common goal groups. There will be conflict over task distribution and resource allocation, differing viewpoints, and often interpersonal problems as well.

Three types of group conflict have been recognized and researched in the last decade in organizational settings: task conflict, relationship conflict, and process conflict (Jehn, 1995). Relationship conflict is defined as disagreement over personal issues not related to work. Relationship conflicts frequently reported are about social events, gossip, clothing preferences, political views, and hobbies (Jehn, 1997). These conflicts deplete energy and effort that could be expended toward task completion and consolidation around mutual goals. It has been shown that relationship conflict has negative effects and is responsible for outcomes such as increased turnover, high rates of absenteeism, decreased satisfaction, low levels of perceived performance, poor objective performance, and low commitment (Amason, 1996; Baron, 1991; Jehn, 1995; Jehn, Chadwick, & Thatcher, 1997).

Task conflict is defined as disagreement about work-related issues. Task conflict, which is focused on content-related issues, can enhance performance quality. For example, critical debate among members and open discussion regarding task issues increase group performance because members are more likely to offer and evaluate various solutions, thus reaching optimal decisions and outcomes (Cosier & Rose, 1977; Schweiger, Sandberg, & Rechner, 1989). However, conflict in any form can create an uncomfortable environment, decreasing individuals' motivation and satisfaction (Amason & Schweiger, 1994).

Process conflict refers to disagreement over delegation of duties and resources. Jehn (1997) delineates between task and process conflict based on findings of an ethnographic study of work groups. Process conflict is usually associated with the resource allocation and distribution of responsibilities within the group. These processes are normally tied to group members' compensation and can promote competition over limited or scarce resources. This is likely to result in tension within a group. Once the tension is increased, employees are likely to become less satisfied.

Process conflicts among members about logistical and delegation issues—how task accomplishment should proceed in the work unit, who is responsible for what, and how things should be delegated—have been less researched (Jehn, 1997). Jehn and Mannix (2001) found that to best understand the effects of process conflict, group processes must be examined over time. High-performing teams were found to have a conflict profile that included moderate process conflict during the early stage of group formation (i.e., arguments deciding who is best qualified to perform a specific task), low process conflict during the middle of group task performance while members focus on the task, and a slight increase in process conflict toward completion of the task as members again discuss roles and duties to efficiently and effectively finish the task (Jehn & Mannix, 2001).

A main input to group processes, especially conflict, is member demographics and the resulting diversity within the group. Because of negative categorization processes, members of demographically heterogeneous groups are likely to experience frustration, discomfort, hostility, and anxiety that can result in animosity and annoyance between individuals and, hence, relationship conflict is likely to emerge within the group (Tajfel & Turner, 1986). As salience of members' differences increases, polarization among members is likely to grow as well, which can result in more fights over non-task-related issues. Variety in knowledge and experiences can lead to disagreement among members about group tasks, and such disagreement is often linked to better decisions and group performance but not always to higher satisfaction (Jackson, 1992). This is consistent with the research on groupthink. One interesting finding regarding educational differences among members is the formation of hierarchy and status differentials within the group, which rather than improving group processes tends to cause resentment, loss of motivation, and lower performance (Jehn, Northcraft, & Neale, 1999).

The type of task the group performs, as well as the norms the group develops, moderates the relations between conflict and performance. If the group task is complex, nonroutine, and creative, a moderate level of task conflict is more effective in producing high-quality decisions than no task conflict. If the task is routine, has standard operating procedures, and is repetitive, low levels of task conflict are more effective for task completion (Jehn, 1995). If groups have norms that encourage task debates but discourage personal attacks, the group is more likely to be a high-functioning team with members more likely to be satisfied with the interaction and likely to remain in the group (Simons & Peterson, 2000).

Much of the past research and theorizing on conflict examines individual and group outcomes such as performance and satisfaction. Lacking is research connecting conflict management to creativity and innovation, a necessary output to examine in today's competitive, fast-changing environment in which new products, creative decisions, and integrative outcomes are necessary (De Dreu & West, 2001).

An External View of Groups

The external view of teams explores how the boundary activities that link the team to its external environment impact performance and how the external context in which a team resides influences the team's process and performance. This work fits squarely in the functionalist perspective in that its quest is to discover what makes teams more effective. Furthermore, the

predictors of effectiveness include input factors (e.g., the context), and process dimensions (e.g., boundary activity), following the input-process-output model. The story of the evolution of the external view and its relation to the functionalist perspective follow.

Much of the work on the external view of teams has at its roots some of the original ideas presented by the seminal creators of the functional perspective. For example, George Homans (1950) posited both an internal and external system that enables the group to survive in its environment. He saw the environment as presenting some initial and subsequent conditions to which a team must adapt. Team behavior was not a one-time event but rather cycles of interaction between the team and its environment that could enter either positive or negative feedback cycles. One of Kurt Lewin's (1948) contributions to the external view was the prediction that a team's ability to adapt is related to the permeability of its boundaries and the nature of the interactions across those boundaries. These ideas are all based on some of the core assumptions of the functional perspective: an interest in team goals, a focus on team effectiveness, and the notion of interplay among inputs, process, and outputs. What differentiated these ideas was the focus on the external environment and cross-boundary processes.

One of the major predictions of this external view is that boundary activity is a key component of group process and one that plays a central role in predicting performance. In a study of 100 sales teams in the telecommunications industry, Gladstein (1984) showed that group process broke not into the traditional categories of task and maintenance behaviors (Philip & Dunphy, 1959) but rather into the categories of intragroup processes and boundary management. Thus, team members view the behaviors necessary to interact with the environment as separate and distinct from internal behaviors.

At this point, there is a fair amount of evidence that these boundary behaviors are related to the performance of teams (Ancona & Caldwell, 2000). Those studying innovation have focused on the transfer of technical information across team boundaries (Aldrich & Herker, 1977; Allen, 1984; Hansen, 1999; Katz, Tushman, & Allen, 1995). In general, these studies show that when the task is uncertain or when the outside information needed is complex, then boundary activity is positively related to performance (cf. Scott, 1997). Teams that are able to capitalize on diverse external networks have a greater learning capability than those that cannot leverage diversity (Reagans & Zuckerman, 2001).

Studies of consulting teams, product-development teams, and drug-development teams (Ancona, 1990; Ancona, Bresman, & Kaufer, 2002; Ancona & Caldwell, 1992) show it is not simply the amount of external communication

that determines team performance, as information-processing theorists had posited (Thompson, 1967), but rather it is the nature of that interaction. More specifically, teams whose members engaged in ambassadorial activity (behaviors aimed up the organizational hierarchy to gain resources, convince others to support the team, and protect the team), task coordinator activity (behaviors aimed laterally throughout the organization to get feedback on product design and coordinate and negotiate with outside groups), and appropriate amounts of scouting activity (behaviors aimed within and outside the firm to scan the technological and market environment) were higher performers than those who remained isolated or engaged in other forms of activity.

The external view also emphasizes the role of inputs in shaping team process and performance. Inputs have included the physical environment, team composition, team structure, organizational structure, resources, rewards, and leadership (cf. Becker & Baloff, 1969; Hackman, 1987; Kiesler, 1978; Perrow, 1967; Sundstrom, 1999). Recent work on time and timing has also emphasized the temporal context of teams. Building on the work of McGrath and Rotchford (1983), it has been argued that temporal variables—pace, cycles, and rhythms—are key aspects of the environment that exert influence on teams. Using this temporal lens, the context is seen to play the role of external pacer, rhythm setter, creator of windows of opportunity, source of interrupts, and a key influence on the meaning of time (Ancona & Chong, 1996, 1999).

Answers to the Seven Questions

As described in the introductory chapter, a set of questions can be used as a means to compare and contrast the different theoretical perspectives. Here are the seven questions and the seven answers from the functional perspective. See Table 2.2 for a summary of major points.

What Facets of Group Composition Affect the Group's Interaction and Performance?

It is quite clear that group composition has a significant impact on group and team performance. Group size has a major impact on group interaction and performance on a variety of tasks (see Bonito & Hollingshead, 1997, for review). Larger group size can increase social loafing and interference/blocking and thereby diminish performance, but larger group size also increases the chance of a greater range of abilities. Equality of participation is inversely related to group size in face-to-face groups. However, there is

Table 2.2 Key Findings of Functional Perspective Research

Group composition	• Increased group size is negatively related to effective processes (e.g., social loafing and blocking) and equality of participation, and positively related to range of abilities • History among group members improves group performance • High-status group members participate more and are more influential in group discussions • Personality traits of group members affect group performance, contingent on task and organizational culture • The effect of demographic and characteristic diversity on performance is moderated by task • Group members' external connections are helpful to group performance
Group structure	• Technologies can enhance or constrain group processes and performance depending on the type of task. • Leadership, expert roles, and self-management influence patterns of interaction in groups. • Status, hierarchy, and power affect group interaction and performance. • Effects of network structure on group performance are moderated by group size and the type of task.
Group projects	The type of task determines interdependence, boundary activities with external environment, and cooperation/competition
Interaction	Group interaction serves information processing, analytical, procedural, goal-setting, rhetorical, conflict management/negotiation, controlling, and group maintenance functions
Group action/outcomes	• Outcomes of task-oriented groups include a product of some kind (decision, solution, etc.), rules of engagement, interpersonal relationships, and beliefs about the group and its members • Group discussion results in biases in social judgment (e.g., ingroup/outgroup distinction, task competence, credibility) • Group actions develop group cohesiveness
Change over time	• Phases and activities in different phases serve different functions over time • There is no universal order of group development that predicts success or failure of group decision making

(Continued)

Table 2.2 (Continued)

	• Group development is not uniform, and movement of stages is often dramatic, quick, and unpredictable
Ecology	• The physical environment (e.g., crowding, proximity, privacy) influences group interaction and performance • The temporal environment determines opportunities, rhythms, and pacing of the team • Dynamism in the environment and the rate of external change determines group members' need for external boundary activity • Time pressure reduces quality of group performance and decision

evidence that larger groups increase performance in electronic brainstorming groups (Valacich et al., 1994).

There are many studies of ability composition in groups (Devine, 1999; Devine, Clayton, Philips, Dunford, & Melner, 1999). The most intriguing aspect of that literature is that there is often not a straightforward relation between the abilities of group members and the performance of the group. Group interaction may interfere with the clear expression of individual abilities. However, groups composed of people who know each other well or who have worked together in the past solve problems better than comparable groups of strangers. One explanation for this phenomenon is that experienced groups make better use of each individual's expertise (Moreland, 1999).

Status differences among group members affect interaction and performance. In group discussions, high-status members participate more and are more influential than low-status members (Dovidio, Brown, Heltman, Ellyson, & Keating, 1988; Kirchler & Davis, 1986). These effects are present even in computer-mediated settings (Hollingshead, 1996a, 1996b; Weisband, Schneider, & Connolly, 1995).

A growing body of research shows that personality traits are related to group interaction and performance (see Moynihan & Peterson, 2001, for a review). The relations generally take one of three forms. The first is universal: Certain traits always predict group performance and process. For example, high levels of agreeableness and emotional stability in groups are generally associated with cohesive group process, and conscientiousness is generally associated with task focus (e.g., Barrick, Stewart, Neubert, &

Mount, 1998; Bond & Shiu, 1997; LePine, Hollenbeck, Ilgen, & Hedlund, 1997). Extraversion may also be related to group performance (Barry & Stewart, 1997). The second form is contingent: Certain traits predict group process and performance depending on the task or organizational culture. For example, high levels of conscientiousness are associated with team performance, except on creative tasks (e.g., Waung & Brice, 1998). Finally, the third form is configurational: Group process and performance are predicted by the mix of traits within a group. For example, personality heterogeneity is generally beneficial for task-related outcomes, and homogeneity is beneficial for relationship-orientated outcomes (e.g., Hoffman & Maier, 1961).

Quite a few studies examine gender effects (same-sex groups versus mixed-sex groups; and all male versus all female groups) on group interaction and performance, with mixed results (see Eagly, Karau, & Makhijani, 1995; Eagly, Wood, & Diekman, 2000, for reviews). However, we know very little about differences in composition based on demographics other than gender (see Jackson, 1992, for review). Few studies have examined the effect of racial composition on group interaction (Filardo, 1996) or the effects of cultural diversity or homogeneity on group performance (Watson, Kumar, & Michaelsen, 1993).

Diversity that increases task-relevant skills and knowledge can be helpful to performance. However, too much of that diversity may not be helpful because of group members' failure to understand one another. Diversity on characteristics not related to the task may be problematic in that it may elicit negative emotional reactions or attitudes and increase turnover (Jackson, 1992). To the extent that diversity inhibits cohesion or task commitment, it can be harmful for groups with certain types of tasks. A recent meta-analysis suggests that the homogeneity or heterogeneity of group composition has little effect on group performance (Bowers, Pharmer, & Salas, 2000). The effect of diversity on performance appears to be moderated by task difficulty.

If one assumes that boundary activity is related to performance (cf. Ancona & Caldwell, 1992) and that external ties bring in crucial information (Reagans & Zuckerman, 2001), then composition is helpful to team performance to the extent that the team members have the necessary external connections. Thus, members should be chosen not solely with respect to who they are and how they will interact but also with respect to whom they know outside their group.

Research on group composition has often been restricted to looking at group members' average level on a particular characteristic and investigating only one characteristic at a time rather than multiple characteristics simultaneously. The study of group composition has been slowed by the difficulty of assembling a large number of groups with different configurations on a

particular set of traits and by the lack of powerful statistical techniques for detecting statistical differences in small sample sizes. Berdahl (1998) described potential advantages of using computational modeling for studying group composition dynamics.

How Do the Group's Projects Affect Its Interaction and Performance?

As previously indicated, the type of task is important in determining the impact of a host of social and personal variables. There is a considerable body of literature on the main effects of task on group process and performance (Hackman & Morris, 1975) which continues to contemporary research on work teams that gives prominence to the design of team tasks (Hackman, 1987).

Roby and Lanzetta (1958) proposed one of the first meaningful task classification schemes, suggesting that tasks had objective properties and modal properties, which represent typical behaviors that groups exhibit while working on the task. Later task classification systems include: disjunctive/conjunctive/compensatory/additive (Steiner, 1972) and intellective/judgmental (Laughlin, 1980).

McGrath's (1984) circumplex model is the most often cited way to categorize group tasks. The research emphasis has been on cognitive tasks (problem solving, decision making, idea generation) rather than on behavioral tasks in the physical realm (such as sports teams and musical bands). The nature and degree of interdependence that group members have while working on tasks and projects have large and direct impacts on group interaction and performance (Thompson, 1967). In addition, tasks can also affect relations between the group and its external environment: The greater the external interdependence with others, the greater the need for boundary activity (Ancona & Caldwell, 1992).

Group interaction is directly linked to group tasks. The demands of group tasks dictate the important functions that have to be performed interactively for a group to be successful. The performance of those functions shapes the structure of interaction development. Task type mediates the relations between the performance of functions and group performance (see Orlitzky & Hirokawa, 2001, for the meta-analysis of the functional perspective).

Group goals are also important in determining task success. There is an extensive literature on intragroup cooperation or competition (Mulvey & Ribbens, 1999; Pate, Watson, & Johnson, 1998; Stanne, Johnson, & Johnson, 1999). A less extensive literature discusses the effects of intergroup cooperation or competition on the performance of small groups (cf. Tajfel, 1982).

How Are Groups Structured, What Tools and Technologies Do They Have Access to, and How Do Those Structures and Technologies Affect Group Interaction and Performance?

In the last decade, considerable interest in groups and technology has emerged. Many features of technologies (members distributed or co-located, synchronous or asynchronous communication, anonymous or identified members, the presence of decision support or a facilitator) can enhance or constrain group processes and task performance (see McGrath & Hollingshead, 1994, for a review). Very few studies have demonstrated that groups communicating via computer perform better than groups interacting face to face, although many have demonstrated that computer-mediated groups perform less well than or as well as face-to-face groups. Even though computer-mediated groups generate less communication and use less information in their decisions, they take longer to make decisions. Although groups interacting via computer may perform worse on tasks initially than face-to-face groups, the performance advantages of face-to-face groups diminish over time (Hollingshead, McGrath, & O'Connor, 1993). These findings suggest that groups can adapt to their technology.

There seems to be an interaction effect of task and technology on the quality of group performance. Electronic groups produce more ideas of higher quality on idea-generation tasks. Face-to-face groups tend to have higher quality products on intellective and negotiation tasks. Some studies have found that computer-mediated groups exchange less information and are less likely to repeat information in their decisions than face-to-face groups. In some cases, this reduction can lead to poorer outcomes for newly formed groups. However, the structure that is imposed by the technology rather than the technology itself may be responsible for this effect (Hollingshead et al., 1993).

Different patterns of interaction have led to classifications of group member roles (Stogdill, 1974). The role of leader has been studied most. Many theories of emergent leadership and effective leadership have developed over the decades (see Bass, 1990, for review). More recently, the collective information-sharing area has examined the influence of expert roles on information sharing and decision making (e.g., Stasser et al., 1995). There has also been a recent emphasis on teamwork, with the presumption that this will increase group motivation and performance. Some case study evidence suggests that self-managed teams can be effective (Hackman, 2002; Manz & Sims, 1993). However, there is a general lack of well-controlled research studies to determine exactly what aspects of teamwork structure in organizations are the critical factors (for exception, see Wageman, 2001).

Status, hierarchy, and power are aspects of the group's structure that affect group influence and performance (see Chapter 5, this volume, for a more detailed analysis). Performance norms can also be influential (Postmes et al., 2001). Group norms influence the development of cohesiveness, which can be thought of as a component of the group's structure. Much research has examined the effects of cohesiveness on group decision-making and performance (see Mullen & Copper, 1994, for review). Too much or too little cohesiveness can have a negative impact on group performance.

Although no network structure is universally superior in facilitating group performance, some network structures appear to be more facilitative for certain types of tasks. Leavitt (1951), for example, used a simple symbol-identification task and found that centralized structures (such as the wheel) produced higher quality group performance than did decentralized structures (such as the circle; see Chapter 8, this volume, for a more detailed analysis). Shaw (1964) obtained the opposite findings using a more complicated mathematical problem. He concluded that the influence of network structures on group performance is limited by the size of the group, the subject population, and the kind of task. Of these, Shaw (1964) viewed task as the most crucial variable.

What Kinds of Group Interaction Processes Does the Group Carry Out and How Do These Processes Affect Other Factors and Performance?

Different types of group interaction have been studied relatively independently. Interaction process includes both content (what is said) and patterning (how it is said). The emphasis has been on the former, but the latter has received some attention (Bonito & Hollingshead, 1997).

Hirokawa and Poole (1996) argued that group communication performs at least nine sets of functions in groups:

1. Information processing (the analysis and combination of information, as well as the generation, elaboration, and evaluation of ideas)
2. Analytical processing (the assessment of circumstances and contingencies surrounding the choice-making situation)
3. Procedural functions (the establishment and maintenance of procedures and rules)
4. Goal-oriented functions (the establishment of group goals and values)
5. Synergistic functions (the coordination and motivation of the activities of group members)

6. Rhetorical, encompassing persuasion, social influence, and leadership
7. Conflict management and negotiation
8. Control
9. Creation and maintenance of group cultures and climates

Much of the recent research on groups conducted from the functional perspective has investigated information-processing functions. Hinsz, Tindale, and Vollrath's (1997) article in *Psychological Bulletin* on "groups as information processors" summarizes this body of research. Conflict-management processes have been studied more by negotiation researchers than by group researchers (see Pruitt & Carnevale, 1993, for review). However, some research examines conflict management as an input-group performance mediator (e.g., Jehn & Shah, 1997), and other recent research studies the effect of constructive controversy (effective conflict management) on group performance (e.g., Alper, Tjosvold, & Law, 1998). Wittenbaum, Vaughan, and Stasser (1998) presented a model of group coordination, including how members tacitly or explicitly coordinate their actions in task-oriented groups.

Hackman (1990) and McGrath (1991) discuss the importance of group viability over time. If the group accomplishes its present task but is unable to continue its work into the future, then it is not a high-performing team.

What Results From Group Action?

Research from the functional perspective has focused heavily on the evaluation of group performance and much less on aspects such as group viability, member satisfaction, and organizational-level outcomes. What "results" from group interaction largely depends on the type of group. But in regard to task-oriented groups, the "outcomes" of groups include: (1) a product of some kind (decision, solution, etc.), (2) agreed upon rules of engagement, (3) interpersonal relationships among members, and (4) lasting attitudes and beliefs about the group and its members—some that are shared by some or all members of the groups and others that are unique to individual group members.

During the 1990s, some research examined the effect of group discussion on biases in social judgment (e.g., fundamental attribution error, base rate fallacy, consensus overutilization effect; see Tindale, 1993, for a review). For these tasks, there is a normative standard for assessing good group judgment. The output of groups in many of those studies consists of social judgment about target people outside of the group. Wittenbaum, Hubbell, and Zuckerman's (1999) research on mutual enhancement has examined the

influence of information sharing in groups on members' task-related social perceptions (e.g., task competence, credibility) of one another and themselves (Wittenbaum, 2000). Members who discuss shared information evaluate one another as more task capable than members who discuss unshared information.

Cohesiveness can also be a result of group action. Some studies have examined the factors that influence the development of cohesiveness in groups (Hurst, Stein, Korchin, & Soskin, 1978; McClure & Foster, 1991). Performing well may result in members feeling attracted to one another.

How Does the Group Change Over Time?

This is another understudied area in the group-performance domain. A body of research on time and change in groups rests on a functional analysis: namely, that phases and activities serve different functions over time. Work that fits into this category includes: interaction process analysis (Bales & Strodtbeck, 1951), phasic models of interaction (Fisher, 1970; Tuckman, 1965), decision development (Poole & Roth, 1988, 1989), and time, interaction, and performance (TIP) theory (McGrath, 1991; see Chapter 9, this volume for more detail).

However, much of the research conducted from the functional approach is normative rather than descriptive and emphasizes the factors and processes leading to effective group performance. Hirokawa (1983) showed that group development is related to group performance. However, Hirokawa (1985, 1988) later found no universal sequences of phases that were associated with either group success or failure.

How Does the Group's Ecology, Including Its Physical, Social, Organizational, and Technical Environment as well as Intergroup Relations, Affect Its Interaction and Performance?

The role of the physical environment on group interaction has not been sufficiently addressed by the functional perspective. A few studies examine environmental factors and group performance (crowding, privacy, personal space, presence of posters), and some literature emphasizes design to encourage group interaction (sociopetal design) (cf. Shaw, 1964). Burgoon (1992) discusses proximity and its effects on relationships in groups. Recently, there has been an interest in studying the impact of the natural environment on performance and group interaction.

The literature on teamwork has documented the importance of organizational structure, leadership, and support (e.g., Hackman & Morris, 1975).

A few studies have examined how accountability to others outside of the group affects group performance and decision making (Lerner & Tetlock, 1999). Ancona and Caldwell's work (1992) examines environmental adaptation, particularly in organizational settings. The more dynamism there is in the environment and the greater the rate of external change, the greater the need for external boundary activity.

Much research has shown that time pressure hurts group performance and decision quality (e.g. Karau & Kelly, 1992; Kelly, Jackson, & Hutson-Comeaux, 1997; Kelly & Karau, 1999). In that research, time pressure is typically imposed from outside the group.

Challenges and Debates for the Functional Perspective

As the prior sections illustrate, the functional perspective explains many group decision-making and performance dynamics. Its strength lies in its ability to predict and explain task-oriented group performance as influenced by static inputs and processes. As a result of research and theory guided by the functional perspective, the group dynamics literature is filled with lessons about how group composition, structure, task-related goals, and interaction processes influence the effectiveness of groups and organizations. Managers and team leaders may use these lessons to implement interventions and training to help groups function more successfully. If a group's goal is optimal task performance at one point in time, then the functional perspective is an ideal lens through which to understand, predict, and assist group functioning.

The features that make the functional perspective attractive are also the qualities that contribute to its weaknesses. First, research and theory from the functional perspective typically ignore groups whose main purpose is to attain goals that are not task-related but rather social-emotional, or groups that have both task and socioemotional goals. To the extent that the functional perspective views effective task accomplishment as the main group goal, then interesting processes regarding how groups satisfy multiple goals during task completion are not well understood.

Therapy groups, social support groups, clubs, and Greek organizations are examples of groups that have largely social-emotional goals. Members of therapy groups seek collective psychological well-being; social support groups aim to provide an outlet for acceptance, validation, and healing; and members of Greek organizations want to achieve camaraderie, inclusion, and friendship. Researchers could use the framework of the functional

perspective to develop a set of requisite behaviors or activities during interaction for the attainment of socioemotional goals.

By researching and specifying the functions necessary for attaining different socioemotional goals, researchers may be able to extend the functionalist framework to groups that have multiple goals. A key function in groups with multiple goals would be the balancing, sequencing, and prioritizing of multiple goals. This extension may even provide leverage in analyzing complex dynamic systems.

A related weakness is the manner in which functionalists assess effective group action. Scholarship within the functional perspective evaluates group performance against some standard. The standard consists of normative criteria that identify how groups should perform. These criteria are typically based on a rational model that assumes that members should act in a manner informed by logic, facts, reason, and conscious deliberation. To the extent that group action reflects unconscious processes, social or political interests, incomplete information use, or irrational thinking, group performance is considered defective. Researchers in the functional tradition generally assume that they understand the best group processes and outcomes better than group members. However, such an approach fails to understand group processes from the perspective of the goals and interests of the group members.

Because the functional perspective views group outcomes as the linear function of inputs and processes, it cannot explain cyclical, nonlinear group dynamics, or reverse causality. Group action is presumed to result from a chainlike series of events, with outcomes representing an endpoint in the chain. However, certain inputs and processes might contribute to outcomes, which then contribute to different inputs and group processes. The functional perspective cannot account for complex, adaptive, dynamic systems over time. McGrath, Arrow, and Berdahl (2000) recently advocated that group scholarship in the future should move away from a simple functional perspective and toward one that allows for the study of groups as complex, dynamic systems. See Stohl and Holmes (1993) for another critique of the functional perspective.

Future Research Directions

Although the majority of small group research has been conducted from the functional perspective, many pertinent research questions remain unanswered. In this section, we expand on some weaknesses of this perspective and suggest three promising directions for future research: (1) expanding the types of inputs, processes, and outputs studied and exploring more complex relations among them; (2) using more and varied research methods; and (3) studying continuing groups at multiple time points.

Expanding the Types of Inputs, Processes, and Outputs

Research from the functional perspective has focused on some inputs, processes, and outcomes to the exclusion of others. Regarding input factors, much research has examined the effects of composition diversity or homogeneity on group performance. However, composition diversity has largely been limited to differences in gender, ability, and motivation. Little is known about how variation in member composition based on race, cultural background, or personality affects group outcomes. Also, existing research has been biased toward examining cognitive tasks. Most studies within the functional perspective examine decision making, idea generation, negotiation, or problem solving rather than behavioral tasks that require a physical performance or the execution of a plan or decision. Knowledge of groups from the functional perspective would be improved if studies examined a wider range of group task and composition variables within the same design.

Regarding group processes, much is known about the content of group discussion (i.e., what members say to one another), but less is known about discussion patterns (i.e., the structure of talk). Dabbs and Ruback (1987) advocated that discussion patterns such as onset, offset, delays, interruptions, sequencing, simultaneous speech, speaking-turn length, and distribution of talk time across members can predict important group outcomes such as leadership emergence and idea generation. The process of conflict management has received much attention among researchers who study dyadic negotiations. However, more research is needed to understand this process in larger groups. Finally, the functional perspective largely focuses on outcomes related to group task performance. Group maintenance and member satisfaction are other goals that might be served by functions (McGrath, 1991), but most of the perspectives that are reviewed here emphasize production and effectiveness goals. Additional research is needed to explore other outcomes such as member satisfaction and learning, group solidarity and viability, and organizational-level consequences.

More research is needed that explores greater complexity between input variables and processes. Many of the studies within the functional perspective examine simple input-process, input-output, or process-output relationships. More studies should incorporate all three steps in the chain (i.e., inputs, processes, and outputs). Too often, research studies focus on one type of task goal to the exclusion of others. Research that examines the interrelations

among processes involved in negotiation, decision making, and idea generation would be invaluable.

Using More and Varied Research Methods

The laboratory experiment is the most commonly used method for examining groups within the functional perspective. If identifying causal connections between inputs, processes, and outcomes is of primary importance, then the experimental method is an ideal method. However, other research methods can be used to address some holes in understanding groups from the functional perspective. Despite the bias toward laboratory experimentation, there is some (largely nonexperimental) research examining groups in natural contexts. For example, Peterson, Owens, and Martorana (1999) developed an Organizational Group Dynamics Q-sort, a 100-item instrument designed to assess group process across a wide variety of data sources. Unfortunately, there is often a significant gap between basic and applied research in methods that are used and inputs, processes, and outcomes that are examined. The development of more sophisticated methods for studying groups in organizational and political settings may help to close the gap between basic experimental research and applied research in natural settings.

In addition, meta-analysis can be a useful tool for aggregating general effects of inputs and processes. Single studies only address a few inputs and processes. Meta-analyses can find patterns across the primary studies that will allow researchers to better identify and apply the fundamental principles of small groups from the functional perspective.

Studying Continuing Groups at Multiple Time Points

With few exceptions, researchers from the functional perspective have examined the antecedents and processes associated with effective performance of ad hoc groups working together on one task at one point in time. Clearly, more research from the functional perspective needs to investigate groups embedded in larger social systems and how effective and ineffective groups adjust in response to changes in their environment.

We need to find out whether our theories about effective group performance also apply to continuing groups. Some research suggests that groups perform better when members know something about one another's knowledge (e.g., Hollingshead, 2001; Wegner, 1987). However, experience can also lead to a lack of innovation and poor responses to nonroutine events (Waller, Conte, Gibson, & Carpenter, 2001). When and under what conditions will group experience lead to improved group performance? Studying

groups in their natural settings at multiple points in time will enable researchers to begin to answer that question and to develop interventions for experienced groups that are performing poorly.

Note

1. We use the terms *groups* and *teams* interchangeably in this chapter.

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