

AN EXAMINATION OF THE ROLE OF  
COMMUNICATION VARIABLES AND DECISION MAKING IN  
STRUCTURED PROBLEM SOLVING GROUPS

by

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". . . the doing matters more than the attainment . . ."

Peter Matthiessen, The Snow Leopard

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For my faithful and loving friends and family,  
in gratitude, affection and respect

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CHAPTER I  
INTRODUCTION

The growing recognition that human resources are the key to productivity has led to an increased awareness of the importance of small group problem solving. American industry in particular, is decentralizing, breaking down into manageable "chunks" or small groups of decision makers. More workers are involved in making decisions and solving problems rather than just a few people in the corporate hierarchy.

This involvement of more workers in the decision making process and in problem solving groups underlies the need for optimum problem solving and decision making guidelines. Bobele and Buchanan (1976) state that "the complexity of today's business environment creates increasing pressure on the organization and the manager's job. Better problem solving skills could help organizations survive and grow and, in addition, help the manager cope with his situation" (p. 255). Young (1980) agrees, "The group problem solving meeting is. . . an especially effective approach for solving complex novel problems which occur in organizational settings" (p. 3.).

One consequence of this involvement of more workers in problem solving is a proliferation of problem solving techniques and models. This, in turn, has led to an increasing emphasis on the importance of individual contributions to the group and the coincident need for more people to be well-versed in the varied approaches to problem solving and the communication processes inherent in them.

Toffler (1980) states that we are in the midst of the rise of a new civilization coming from the death of industrialism. Ferguson (1980) presents the same hypothesis substantiated with research and specifically cites trends that are occurring world-wide: old ways of thinking, dogmas, formulas--no longer work. We are developing new modes of communication, new life styles, new values and technologies, new ideas and analogies, classifications and concepts.

Third Wave employers increasingly need . . . men and women who accept responsibility, who understand how their work dovetails with that of others, who can handle even larger tasks, who adapt swiftly to changed circumstances, and who are sensitively tuned in to the people around them (Ferguson, 1980, p. 401).

In other words, there is an increasing need for people who can solve problems creatively and at the same time effectively communicate with others.

In their book, In Search of Excellence, Peters and Waterman (1982) indicate an overall developing pattern. It seems that in the companies doing well financially, the emphasis is upon people: appealing to their inner motivations

and allowing them to be part of the organization but also helping them excel individually. Companies such as these are (1) ensuring employee participation in decisions that affect employee work environment; (2) encouraging a great deal of informal communication; (3) using ad hoc groups for solving problems; and (4) accomplishing more problem solving and decision making in small groups of people. Essentially, these organizational trends will result in involvement of more people in problem solving situations where effective relational communication is needed--people will need communication skills to be satisfied with the problem solving process. Easton (1971) cites a study that pinpoints the improvement of problem solving ability and communication skills as essential ingredients for enhancing organizational efficiency and effectiveness (pp. 1-2).

The interrelationship of this "new order" to problem solving and communication skills--especially the relational or interpersonal aspects of problem solving groups--seems assured. Practically and humanistically communication skills in problem solving situations are of vital importance.

### The Study and Its Setting

#### The Nature of the Problem

Communication is basic to problem solving groups. Without communication, groups could not function--it is the means by which problems are discussed and resolved.

The manner in which group members communicate has been of concern to many scholars who acknowledge that a group must address the task or problem to be solved but at the same time deal with the manner in which group members communicate (Bales, 1953, pp. 142-3; Hare, 1976, p. 6; Collins & Guetzkow, 1964, p. 61). Steiner (1972) refers to the manner in which group members communicate as "group process" (pp. 8-9). Group process or the interpersonal communication between group members must allow for the effective resolution of the task at hand and at the same time meet the relationship or social and emotional needs of group members (Bales, 1953, pp. 142-3; Collins & Guetzkow, 1964, p. 61; Fisher, 1980, p. 67; Hare, 1976, p. 6; Hoffman, 1979, p. 188; Hoffman & Maier, 1964, p. 264; Tuckman, 1965, p. 385). Effective communication can lead to satisfaction with the quality of the solution (resolution of the task) and acceptance by group members with the decision (meeting social and emotional needs) (Carney, 1977, p. 8; Collins & Guetzkow, 1964, p. 60; Hoffman & Maier, 1967, p. 166). Within a problem solving group, these task and social dimensions of group interaction are--for all practical purposes--inseparable and interdependent,\* and must be studied with that interdependency in mind (Fisher, 1980, p. 67). However, this fact does not preclude separating these two dimensions for analysis.

For group members to reach a high quality decision

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\*Every verbal interaction has a content and a relationship dimension (Fisher, 1980, p. 100).

in terms of the objective facts of the problem and at the same time feel satisfied with the decision is difficult to achieve in problem solving situations (Van Gundy, 1981, p. 281; Hoffman & Maier, 1967, p. 175). Current formal structured problem solving methods\* set forth the steps by which a group is conducted through the solution of a problem. However they do not adequately prescribe "how" to communicate during problem resolution that would lead to satisfaction with both the solution and the manner in which members communicated with each other (Pankowski, Schroeder & Jahns, 1973, p. 22 quoted from Newcomb, Turner & Converse, 1962, pp. 477-81; Van Gundy, 1981, p. 218).

This study aims to make clear what constitutes effective relational communication in structured problem solving groups and how research indicates effective relational communication can be achieved.

#### The Need for the Study

Task and relational components are equally important in problem solving groups (Bales, 1953, p. 142; Fisher, 1980, p. 38; Steiner, 1972, pp. 8-9). However, while task requirements are usually addressed by a problem solving

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\*Structured problem solving is a formal, structured approach for solving non-routine types of problems. The majority of these approaches are based upon specific principles and assumptions about creative thinking and problem solving (Van Gundy, 1981, p. 2).

method, relational skills are not addressed or treated adequately. Thus, students of problem solving are left without adequate guidelines for how to achieve quality relational communication. An enigma remains for "the means of developing groups to attain a level of trust, openness, risk-taking and quality of communication adequate to fulfill their interaction and production responsibilities" (Watson, 1969, p. 431).

This neglect of relational skills, or interpersonal communication factors in group problem solving is well-documented. Nemiroff and King (1975, p. 1) and Grossman (1982, p. 62) call for further study to delineate communication skills necessary in group decision making. Other researchers support their findings and decry the lack of the study of the effects of communication variables on group decision making (Carney, 1977, p. 8; Hall & Watson, 1970, p. 299; John, 1953, p. 1; McGrath & Kravitz, 1982, p. 201; Rohrbaugh, 1979, p. 75; Stephenson, Michalsen & Franklin, 1982, p. 320). Isaksen (1983) cites the need for leaders of problem solving groups to have a knowledge of group process so group members can communicate more effectively and achieve greater satisfaction (p. 22).

The second justification for this study is the neglect of relational components of communication in current problem solving methods. Van Gundy (1981) argues that "most problem solving techniques have emphasized the development of task skills" to the neglect of interpersonal communication skills

p. 274). He concluded that all but two out of a total of seventy-five current problem solving methods, emphasized the development of task skills to the neglect of interpersonal skills (Van Gundy, 1981, p. 27)<sup>1</sup>. Further study of three popular problem solving methods\* led this writer to agree that problem solving techniques do not adequately address the relational aspects of communication; that is, the social and emotional problems between people in problem solving groups.

#### Theoretical Rationale for the Study

Analysis of communication in a task group (problem solving group) reveals two simultaneous problems: task obstacles and interpersonal obstacles. Task obstacles are the difficulties group members must overcome when communicating directly about the problem. Interpersonal obstacles include communication directed toward group relationships, such as making oneself clear to others, dealing with conflict, maintaining cooperation, and so on (Littlejohn, 1983, p. 221).

The distinction between task and interpersonal relations has served as a convenient way to study other problem solving group communication. In actuality, these areas are interrelated and are inseparable in accomplishing a task and achieving satisfaction with the group process (Littlejohn,

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\*Norminal Group Technique (Delbecq, Van de Ven & Gustafson, 1975); Kepner-Tregoe (Kepner & Gregoe, 1981, 1979); Creative Problem Solving (Noller, 1977).

1983, p. 221; Fisher, 1980, p. 39). One can fulfill both task and interpersonal functions with a single statement (i.e., information directed toward task and information directed about relationships) (Littlejohn, 1983, pp. 221-2).

Figure 1 (see page 10) is a useful model outlining the general components of the group decision making process. The model illustrates that a group's ability to utilize and integrate the individual skills and abilities of its members will affect individual and group productivity and satisfaction. When group resources are used to best advantage an "assembly effect" occurs in which the group product is superior to the individual work of the most capable member. Similarly, rewards for the group and the individual can be of a positive or negative nature. Successful solution achievement and successful interpersonal communication usually are positively rewarding. However, group outcomes can be evaluated negatively. Positive or negative, these evaluations in turn, affect future task and interpersonal efforts in the group, as indicated by the feedback arrows in the model.

The model in Figure 1 provides a means to illustrate how variables can affect problem solving group effectiveness and satisfaction with the group's manner of communication. For example, if by past experience a group member found that other members of the problem solving group could not be trusted to treat communication contributions with respect,