

**CURRENT TRENDS IN GROUP DYNAMICS RESEARCH AND THEORY**

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## I. Introduction

The student of Group Dynamics is confronted with a broad field of knowledge that appears to be relatively undefined. Any attempt to impose limits and definition on this relatively new and rapidly growing area encounters the difficulty that the phrase group dynamics itself is employed in a variety of ways. Sometimes, as I shall use it in this report, it refers to an area of scientific investigation--of the laws of human behavior in groups. At other times one hears group dynamics used to describe a body of techniques for leading groups, conducting conferences, teaching classes and other practical matters. Group dynamics has even been used at times in reference to a recent movement or philosophy in the field of education.

It seems to be quite appropriate, however, and not in the least disturbing that the phrase should be used in this varied manner, since specialists with quite different interests, objectives and background training are often equally concerned with the subject of group behavior. Social scientists investigate the forces underlying people's behavior in groups,

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1. This paper is based on a lecture given at the School of Speech, Northwestern University, Evanston, Illinois, June 28, 1955, as part of the Special Program in Group Dynamics and Discussion.

with a view to contributing to a science of group dynamics. Educators and practitioners in a great many fields are concerned with applying knowledge about groups in order to make their activities more effective; they are using "group dynamics methods." And those who specialize in the broader philosophical questions of education and training must face the ethical questions inherent in any attempt to foster and direct change. To them the democratic ideological implications which they perceive in group dynamics may be paramount. It often happens, however, at one time or another in his professional activity that the same person will engage in each of these activities and find himself using the phrase group dynamics with each of these different meanings.

It is not just coincidental, either, that the scientific, practical and ethical aspects of knowledge about group behavior are found wedded together under the term group dynamics. When the late Kurt Lewin with his colleagues founded the Research Center for Group Dynamics, just ten years ago, he was concerned with all three problems. This is stated clearly in his objectives for the Center, published in Sociometry, May 1945 (42):

The Research Center for Group Dynamics has grown out of two needs or necessities, a scientific and a practical one. Social science needs an integration of psychology, sociology, and cultural anthropology into an instrument for studying group life. Modern society demands a deeper understanding and a more efficient and less prejudicial handling of group problems. I am persuaded that this need is particularly acute and particularly essential in a democracy.

In what follows I shall treat group dynamics, in what I believe to be its most basic and essential meaning, as the scientific study of the forces responsible for the behavior of people in groups. I wish to consider some of the trends taking place in research and theory in this field. In a science

as young as this one it is difficult to distinguish trends, or to be sure that what one perceives are not just temporary episodes in some long-term developmental flow. But as Lewin pointed out, it is appropriate to view group dynamics as arising from the merging of a number of historical developments in different fields of intellectual endeavor: from the increasing awareness in psychology of the importance of social factors in motivation and the development of personality; from the broadening of the interests of cultural anthropology to include modern cultures and sub-cultures; and from the necessity in sociology to create an experimental science of the study of social systems. And seen in this light, as a developing scientific discipline with long-term antecedents, it may be possible to discern a number of directions that research and theory are taking.

What can be mentioned here must of necessity be limited. In the area of small group research alone, which certainly does not comprise all of group dynamics, there has been a mushroom growth in the last few decades. A recent issue of a sociological journal devoted to small group research<sup>2</sup> contained the somewhat startling information that in the decade of the thirties there were about 21 publications per year devoted to some aspect of small groups; at present the rate of publication is 152 items per year and increasing steadily. Such a mass of material defies the current historian.

This report will, therefore, be restricted to a review of the current

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2. American Sociological Review, Vol. 19, December 1954, "Special Issue on Small Group Research."

research and theoretical activity of the Research Center for Group Dynamics, of the University of Michigan, without any implication that it is representative of the widespread activity of other centers of group research throughout the country. Space imposes further restrictions: on the whole only projects which are either incomplete or not yet described in the literature will be discussed; and only some representative projects in each area of investigation. In the latter part of this paper I shall point out what I believe to be some trends in the development of theory and in the methods of research in group dynamics, discernable in this examination of the Center's current work, and in other research on groups being reported in the literature.

The section which follows will describe a number of projects in each of seven different areas of research activity at the Research Center for Group Dynamics. The first problem area concerns group membership and the factors involved in selecting and identifying with a group. Secondly, we shall deal with those aspects of a person which are determined prior to his entry into a group, which he brings with him into the group: personal resources, social position, and personality characteristics. Thirdly, some studies will be described dealing with the development and change of interpersonal relations in a group, or what may be termed the internal structure of the group. The fourth problem area concerns the effect on a person's behavior of different forms of group structure. Fifth, a particularly important type of structure will be discussed, the structure of relations a person has with power or authority figures. The sixth category includes studies on marginality, and pressures arising out of conflicting group

memberships. Finally I shall describe a number of studies dealing with the factors involved in a person's remaining in or leaving groups. Thus this summary will lead the reader from the problem of selecting and entering a group, through various aspects of group formation and process, to the problem of leaving a group.

## II. Current Research and Theory at the Research Center for Group Dynamics

### 1. Factors leading to identification with a group

It has become increasingly evident that there is much to learn about what it means to be a member of a group. Instead of assuming that any collection of persons is a group and that each person is a member to the same degree, one can theorize about the different types of relations that exist between a person and a group (32). One way of defining such relations is in terms of a person's degree of attraction to belong to a group, and the group's acceptance of the person as a member. Thus, a person who is both highly attracted to membership and highly accepted by the others is psychologically a member of the group. A person who is neither attracted to a group nor accepted by its members is psychologically a non-member, even though he may be physically present.

We are just completing a laboratory experiment in which four such person-group relations were created (29). In each of these relations we are investigating how much a person who is a minority of one will conform to the influence of a majority, and how much members of the majority will attempt to exert influence. The theory being tested predicts that a number of factors will affect and determine these influence processes: the person's relation to the group; whether the task is one that creates an

interdependency among the group members or one where they can succeed or fail independently; and how clearly structured or ambiguous the task itself is.

A different approach to the problem of group membership involves a systematic exploration of the cognitive bases of identification (68). It is theorized that one such process leading to group identification is perceiving other persons as similar to oneself. An experiment in the laboratory is in progress, where volunteer college students are helped to be aware of similarities between themselves and others in a group (53, 78). These others are paid participants acting under precise instructions. Two processes of finding similarity in tastes and preferences are hypothesized in this study: 1. projection of one's own beliefs onto others; 2. introjection of others' beliefs. The experiment was designed to discover the conditions under which each of these processes will occur. The next stages of this project will involve experiments in the laboratory to test the hypotheses that, (a) one tends to identify with a more adequate person, i.e. one who is capable of taking action to satisfy his needs, and (b) when you do identify with an adequate person, it makes you feel more adequate yourself. Finally, the relationship between feelings of adequacy and actual adequate behavior in a group will be investigated.

A quite different project in the area of group membership has been a field study of office girls in a large public utility company (31). After an extensive period of non-participant observation, a wide range of data was obtained from each person for five one-hour periods. The factors related to a high or low degree of identification with the organization have been intensively examined. These include the degree to which a person's

mobility aspirations are being met and the amount of emotional support available to the person from a cohesive peer group. Controlled field experiments are now being designed for several districts of this company, in an attempt to determine the causal direction of the relationships discovered, and to learn how to increase identification with the organization by systematically varying the hypothesized causal factors.

## 2. What does a person bring into a group?

A number of studies at the Center are designed to answer the questions: what does a person bring with him into a group, and how do these characteristics affect what occurs in the group? Three types of such factors can be recognized in the research: (a) Resources of a person stemming from his social relations or position outside of the group, (b) Social and interpersonal skills of the person, (c) Personality characteristics of the person.

(a) External social resources. There is considerable evidence that a person's social position outside of a group has a marked effect on how he is treated by group members and consequently how he feels as a group member. A simple experiment has been repeated many times in the classroom, and also with groups of business men (79). Two volunteers are sent out of a group for a few minutes. The group is then instructed that one of them is a high status person of considerable influence in the community. The other person is portrayed as relatively unimportant and with little power. Some details are filled in to make the roles believable. Then the two persons are brought back into the group by the investigator, without being made aware of the instructions to the group. In the group discussion which then takes



place, it is nearly always observed that group members are more attentive, cordial and deferential to the more powerful newcomer than to the less important one. When these two persons are interviewed afterwards, the person who was the higher status figure reports greater feelings of comfort and more attraction to the group than does the lower status figure.

In another current study in this area, investigators are exploring the roles of children in their families by interviewing both children and parents about relevant areas of family life (48, 59). The study is attempting to predict a child's social behavior in his school classroom from knowledge about his position in his family group, i. e. how dependent he is, how much he participates in decisions, and how much power he has to affect others in the group. The theory hypothesizes that many role patterns built up in a family context carry over to a classroom group and are the bases of a child's acceptance or rejection by fellow students, of his having greater or less influence, and of his developing either an active or a passive role.

(b) Social and interpersonal skills. In one sense a person's social sensitivity and interpersonal skills can be considered part of his "personality." It has been considered useful, however, to distinguish between the characteristic social behavior habits and skills of a person and his more stable, less accessible aspects--and to reserve the term personality for the latter attributes (26). Considerable research has been done with a view to understanding how a person's repertoire of interpersonal skills affects his attainment of a higher or lower power position in a group. This problem has been explored in boys' summer camps (47, 58) and in human relations training centers for adult leaders (50). There is evidence that a

person's socio-emotional resources are closely related to how much interpersonal power he has in a group, since they determine his ability to contribute to the needs of other group members, to group maintenance needs, and to satisfy his own needs in the group situation.

(c) Personality characteristics. A review of the Center's research that is directed towards understanding the effects of personality characteristics on behavior in groups indicates rather quickly that we have no one way of viewing personality or theorizing about it. There is some evidence from a number of different studies, however, that personality syndromes--i. e. persistent patterns of behavior developed at some earlier period in an individual's experience--account for some of the forces underlying his behavior in a group.

Clear evidence for this is provided by a longitudinal field study of adolescent and pre-adolescent boys who had been referred to a therapeutic summer camp because of some personal or social maladjustment (58). Two types, based on behavior syndromes, were identified from the boy's clinical records: the overaggressive, extrapunitive, under-controlled person, and the overinhibited, intrapunitive, over-controlled individual. It was found possible to predict the boy's social behavior in camp groups from this typology, constructed from earlier case history material. The overaggressive boy was most active and influential in a new group; he coerced others and was resistant to peer and adult demands. But others in the group did not really accept his power, consider him a leader, or like

him personally. The overinhibited boy was passive, with little social influence, and conformed readily to others' demands.

In an entirely different setting, the office of a public utility company, and using different methods and subjects, what appear to be similar findings are obtained. The more ascendant, dominant office girls are anxious to be promoted, resistant to influence, socially aggressive and active, and yet find it difficult to win esteem from their fellow workers (31). They react to frustration by attitudinal aggression against the job or the supervisors. Passive, submissive girls react to frustration by staying on the job, conforming more strictly to the institutional norms, and maintaining positive attitudes.

Another personality characteristic which has received considerable attention is called self-esteem (9). A laboratory experiment found that persons with low self-esteem react more strongly to both success and failure in a group than those with higher self-esteem (69, 78). In an attempt to refine this concept, a method has been developed to explore the structure of the self-image, adapted from a technique for investigating the structure of attitudes (77). This work has replaced self-esteem with three dimensions of the self, 1. Ego strength: the ability of a person to control tension within himself (75), 2. Goal orientation: the degree to which goal achievement is a crucial aspect of the self-system (70), and 3. Self unity: the interrelationship of various components of the self (71). Subjects are now being assigned to a laboratory experiment on the basis of test scores which indicate high or low Ego Strength (74). The experiment is designed to investigate a number of hypotheses concerning the interaction

of this personality variable with situational factors to produce the forces underlying particular behavior in groups.

### 3. Developing and changing relations and position in a group

What transpires in a social group is often referred to as process. This term is used to describe different aspects of interpersonal behavior, and of the perceptions, attitudes, feelings and expectations that are both causes and effects of interpersonal behavior. The social scientist attempts to order this process by using some abstract scheme. He employs categories of interpersonal relationship to describe persistently recurring patterns of acts between persons; for example, he speaks of a "communication relationship." He also uses categories of intrapersonal states to describe what is going on within the person; for example, he speaks of a "state of anxiety." The study of process is one of the most complex and crucial areas in the field of group dynamics. I shall discuss some of the Center's research here, under four headings: (a) studying structure as a cross-section of process, (b) studying process directly, (c) formal theorizing about process, and (d) research and theory about changing process.

(a) Studying structure as a cross-section of process. The internal structure of a group can be regarded as semi-stabilized process. When the interpersonal acts in a group are sufficiently patterned and predictable, they can be described as a structure of relationships. Thus we speak of a communication structure, an authority structure, a friendship or "sociometric" structure, and a role structure of a group. One of the methods employed by social scientists, especially in field studies where it is ordinarily difficult to observe process directly, is to obtain data about the structure of

interpersonal relations. From these data the interpersonal processes of the group are reconstructed, or generalizations made about relations between structure and process.

A field study was conducted in a social work agency to explore how the interpersonal relations of the professional and non-professional staff members affected their motivation to remain in their groups and in the organization itself (30). It was found that the higher a person's informal status, the more attractive he found the organization and his own work group. But this relationship held only for members of the professional staff who had a great deal of contact with other members (28). From this structure of relationships, the following circular interpersonal process was inferred: In their day-to-day contacts, the social workers were constantly engaged in discussions of cases and professional problems. When one person made a valuable contribution to the group, whether it consisted of information, ideas, evaluation, advice, support, or just behaving in conformity to acceptable professional standards, he was rewarded at the interpersonal level by approval-cues from the others. When a member deviated from professional norms, or failed to contribute positively to the group's activity, he suffered disapproval or at least a lack of approval. The person who is valued thus becomes more attracted to the situation where he obtains approval. The person less valued finds the situation uncomfortable and dissatisfying. But where face-to-face contact is minimized or lacking altogether, the evaluations of others have little opportunity to affect a person's feelings or motivation.

In another field study of high school faculty groups (54), it was

found that teachers experienced feelings of failure when they saw themselves deviating from the norms of their professional group. The strength of these feelings depended upon the strength of their attraction to this group, and upon the importance to them of the particular issue involved.

It is not sufficient to thus interpret the structure of relationships discovered in field studies. It is desirable, in addition, to study the interpersonal processes directly in controlled laboratory experiments, in order to understand more fully the direction of causation and the other forces in the situation.

(b) Studying process directly. A laboratory experiment was designed to test the findings of the high school field study reported above under more controlled conditions (72, 78). These included a systematic variation of 1) the group members' success or failure, 2) the relevance or non-relevance to the group of the task, and 3) the strength of the group's expectation of success. It was found that when the group had strong expectations of success and the task was relevant to the group, members enjoyed success most and suffered most with failure. But when the group did not expect success, even on a group-relevant task, failure had little significance to the members.

It is also possible under certain circumstances to observe interaction directly in a field situation. A study was conducted in a summer camp, with 8 cabin groups of 8 boys each (37). The research was designed to gain greater understanding of the interpersonal and intrapersonal processes involved in power relations. These processes were conceived to be like continuous feedback mechanisms, beginning with a person's perceptions about

his own standing in relation to others in a group, which fed into the person's behavior toward others, which led to others' perception of the person's behavior, which fed into others' behavior towards the person, and so on. Each stage of interaction between persons was seen as being mediated by interpersonal perceptions and evaluations. The problem was to study this developmental process directly. Each day observers in the cabin groups watched the boys' interaction and analyzed its content to obtain measures of influence behavior. The boys were also interviewed each day to obtain data about how they perceived their own power relative to others. Thus the developing interpersonal and intrapersonal processes were studied over a time period.

One of the findings of this study concerned the existence of great discrepancies between a child's perception of himself and others, and his power relations with others as expressed in behavior. These discrepancies were seen to follow from breakdowns in communication between persons, or distortions of perception due to intrapersonal need systems.

The investigators also brought this problem into the laboratory for more exact study under controlled conditions (38). Each subject was paired with a paid participant, for the ostensible task of helping to develop an aptitude test in city planning ability. Before the task began the subjects were told either that the paid participant was a very experienced city planner, or that he had little experience. During the task the subjects' suggestions were welcomed warmly in some groups, but rejected coolly in others. Halfway through the task the subject received from his partner either a favorable or unfavorable evaluation of his performance depending

upon the experimental condition. Each one of these variables, expertness of the other group member, his acceptance or rejection of suggestions, and positive or negative evaluation, affected the subjects' developing perceptions of power and their objective influence behavior. The most potent factor was whether or not a person's suggestions were accepted or rejected.

(c) Theoretical work about processes of influence. In any scientific activity there is the logical work of building theories and deriving hypotheses, as well as the empirical work of obtaining relevant data for hypothesis testing and construction. The realization that social science would have to develop mathematical tools for precise formulation of theory was one of Lewin's early insights. His formal theoretical work which utilized topological and hodological space (39, 40, 41) is being furthered in a program of mathematical research at the Center, and has been generalized in a form called graph theory (16, 17, 18, 19, 20, 21, 64). This promising development is being employed in a number of studies to lend power to theory construction and precision to conceptualization.

One such experiment has obtained results in support of a modification of Heider's theory of interpersonal relations (22), that a person will try at all times to establish and maintain "balanced" states in his relations with other persons and objects, and that if he cannot establish this balance he will develop feelings of tension (52). Further laboratory experiments are in progress in this area, and a general mathematical formulation of the problem of balance in interpersonal relations has been developed (5, 17, 18).

Graph theory has also been utilized to build a limited but precise theory of interpersonal influence, from which is derived a large number of



hypotheses about power, discrepancies of opinion and the circumstances under which persons will change their opinions (11). These hypotheses are being tested in laboratory experiments.

There is also a major attempt under way, still in an early stage, to utilize graph theory as a basis for a general theory of group dynamics which will express in exact and coherent form all our empirical research findings, and lead to new and more powerful research hypotheses (3). Thus the formal theoretical activity of the Center is one of the most vital and exciting aspects of the total research program.

(d) Changing positions and relations in groups. One of the historical objectives of the Research Center for Group Dynamics has been an understanding of planned change. In his statement concerning the planning for the new Center (42), Lewin concluded that: "the study of group life should reach beyond the level of description; the conditions of group life and the forces which bring about change or which resist change should be investigated." A program of research has been in progress on the induction of change at the intrapersonal, interpersonal, institutional and community levels (34, 36, 46, 47). This research on change is seen as involving both a scientific question, the development of increased general understanding of the change process, and a social question of vital importance in any self-regulating democracy.

There is not space here to more than mention this extensive program of research. Various aspects of it are being described in a number of book-length publications. One describes the intensive study of several groups of German visitors, brought to America by the State Department with a view to

expediting democratic change in Germany (49, 76). Another will present the results of research on the trainees of the National Training Laboratory in Group Development, commonly called Bethel, both during the training process and from follow-up studies in their back-home environments (50). A theoretical volume has now been written treating the general question of planned change in a systematic fashion (51).

#### 4. Effect on behavior of group structure

Many of the studies already discussed in this report have concerned group structure, since after all structure is just a way of talking about stabilized interpersonal relationships. There are a number of studies at the Center, however, which quite explicitly have been designed to vary the internal structure of a group so that the effects on group behavior could be studied.

The effect of having persons either interdependent in their task or quite independent of one another is being investigated in a laboratory experiment (74). The task is constructing a miniature house of cardboard. In the interdependent condition an assembly line relationship is created. Each of five discrete operations must be performed correctly before another can be begun. In the independent condition each person is a craftsman, doing the whole job by himself. Another variable in the experiment is whether the subjects have a group score or an individual score. Hypotheses are being tested about the level of productivity, the degree of frustration, the growth of group norms and cohesive groups, and the unwillingness of subjects to cooperate in the various experimental conditions.

A field study in this problem area also is in progress (63). This

involves experimentally changing the work organization in a pajama factory, the same plant where some of the classical group dynamics experiments were undertaken (7, 43). The purpose of this research is to develop more understanding of the group decision process, using a more refined and differentiated theory. The experimental design considers each sewing unit in the coat line to be an experimental group. In all groups the members participate in decisions regarding the new work methods. In some, however, the workers are encouraged by a discussion leader to make a group decision. In half of these latter groups a group goal is imposed by the leader. The hypotheses predict that group decision will lead to an earlier attainment of previous production levels, to a higher eventual level of productivity, and more frequent experience of group forces toward higher production.

In each of the above experiments the research design calls for systematic variation of the structure of work relations, and observation of the effect of this on behavior in the group.

#### 5. Effect on behavior of relations with power figures

One of the important areas of research activity at the Center concerns the behavior of persons as affected by the power or authority structure. Although it has been pointed out that leadership is a distributed function, and anyone who exercises influence in a group is, in one sense, a leader (2), it is necessary not to overlook the existence in institutions and groups of a formal authority structure. We are recognizing and exploring the effect on a person's behavior of both formal authority and power figures. The distinction is made between the latter two concepts, since power is more

general and may derive from a wide variety of sources (4).

When interaction between persons involves differences in status or authority, the relationship is of particular significance to the lower status person. In a study of the communication in the staff of a social agency (30) it was found that lower status persons greatly over-rated the amount of contact they had with those above them in the hierarchy. This was interpreted as reflecting strong desires for and anxieties about upward communication, and is in accord with findings in other field studies and laboratory experiments (1, 35, 73, 80).

It is also apparent that when persons perceive their own roles differently from how their supervisors see them, this is far more disturbing and affects their behavior differently than a similar discrepancy in role expectations between them and subordinates. This finding comes from a field study of social work supervisors in a sample of agencies, using interview and questionnaire methods (33).

The way authority is used in supervising others, a problem relating back to the classical leadership experiments conducted at the Center, (44, 45) is shown to have considerable effect on people's feelings and behavior, in the study of office girls in a public utility company (31). A close style of supervision which restricts a subordinate's area of decision is resented by experienced girls, especially if they are somewhat personally insecure, and has negative effects on their work performance. One of the problems in this area of research is the inadequacy of concepts for describing types of supervisory behavior which are functionally different in terms of their effects. As a possible solution we are attempting in this study to categorize

styles of supervision in terms of the typical profile of interaction a supervisor has with her subordinates. For example, some supervisors provide their girls with more information or evaluation than others do; some are warmly effective, others coldly impersonal. In time it may be possible to relate a number of objectively described styles of supervision to the feelings and behavior of subordinates and to experiment with changing styles of supervision in a field situation.

One field experiment has already been conducted in a public utility company on changing the role of the supervisor (65). An analysis of this role had led to the conclusion that it included three different functions: helping and teaching, allocation of work, and evaluation of performance. It was hypothesized that the evaluation function was interfering with the helping one. Employees did not like to ask for help when it might be considered an admission of inadequacy, since the helper was also an evaluator. The supervisory role was thus broken up experimentally into three such roles, each one played by a different person and serving only one function. The communication between subordinates and superiors, which took place over an internal communication system, was tape recorded before and after the experimental changes for a period of time, with of course the permission of all persons involved. Among other interesting findings, it was observed that requests for help did increase markedly when the helper was no longer evaluating subordinates.

The conditions under which people are more or less threatened by power figures are also being explored in a number of laboratory experiments.

One of these might be considered a laboratory experiment in a field situation (8). It had all the characteristics of a laboratory experiment--variation of abstractly defined variables under controlled conditions, the same situation repeated many times, and so on--but the subjects were 198 telephone company operators. These are relatively low status persons in the company hierarchy. Each was paired with a trained assistant, who was actually a high status supervisor cooperating with the investigator. Thus 198 two-person groups were run. In each the high status person assigned a task to the subordinate. In half the groups this was done with considerable clarity, in the other half with ambiguous instructions. Another variable was the consistency or inconsistency in the power figure's behavior. The investigator observed the subordinate's behavior, and by measuring her perceptions of the power figure, feelings of anxiety, and self-perceptions was able to arrive at an over-all measure of feelings of being threatened. He found that subordinates feel most threatened when the superior's behavior is unclear and inconsistent.

In an experiment in the laboratory a subject was given a task under the supervision of a paid assistant, supposedly another subject, who assumed authority in a non-constructive, impersonal, arbitrary manner (67). In half the groups the subject was given the opportunity, halfway through the experiment, to meet with another subject from an adjacent lab who was in the same predicament. In the other groups subjects did not have this opportunity to discuss their common problems with peers. It was found that having a supportive peer led to a greater independence of the power person, more expression of hostility towards him, and more motivation to reach

goals in spite of the hindrance of the supervisor. When subjects were alone they perceived and reacted to the supervisor in a more positive and accepting manner, even though the supervisor was, in a sense, aggressing against them.

Some recent theorizing and research in this area of relations with power figures have distinguished among different types of authority (12, 13, 14): voluntary authority, where a person's influence arises from the fact that he is liked or respected; legitimate authority, where a person's influence is a prerogative of an authoritative role and is accepted as such; and coercive power, where a person's influence arises from the fact that he is able to punish others by deprivational acts. Predictions regarding the amount and lasting quality of influence by these different types of power figures are being tested in the laboratory.

To summarize the Center's research on the effects of relations with power figures, we are exploring the significance of the power structure for lower and higher status figures, the effects of different ways of using power in an authority role, the problem of changing the way authority is used by a supervisor, the conditions which make subordinates feel more or less secure when relating to power figures, and the differential effect on subordinates' feelings and behavior of power which derives from various sources. A monograph now in preparation will include a number of the Center's studies in this area of power relations (6).

#### 6. Marginality and conflicting group memberships

The forces which affect a person's behavior in a group have their source not only in his relations with members of that particular group, but

also in his relations with other groups. People are members of many groups and are often subject to conflicting role pressures arising from different sources. A laboratory study is just being completed in which such role conflict is explored by a novel experimental method (15). All the subjects in the experiment are students from India registered at the University of Michigan. The investigator employs two paid participants, one who impersonates an American professor, the other, himself an Indian student, who impersonates a visiting professor from Calcutta. Each subject is interviewed by each "professor" in turn, over an intercommunication system, and the conversation is tape-recorded. A number of content areas are introduced where it is thought American and Indian norms may be different, and predictions are made about the degree to which subjects will be acceptive of influence and deferential in their behavior. Although there are some unsolved problems in this experiment, the method of approaching culture conflict and role conflict seems promising and adaptable to many areas of conflict within our own society.

#### 7. Factors involved in remaining in or leaving groups

Finally in this review of the current work of the Research Center for Group Dynamics, I will describe some studies concerning the problem of why people stay in or leave groups. This completes the circle, for the reader will undoubtedly recognize this as essentially the same problem as why people select or identify with groups, the first area of research activity described in this paper. One formulation of the problem focusses on the prospective or new member; the other spotlights the person who has already attained membership and may be changing to a more central or more peripheral position in the group.



A finding from the study of the social agency staff (30) is relevant to this problem. People were attracted to their work group more or less, depending upon how much they were valued as members of their work group relative to how much they were valued in other parts of the organization. This result suggests how closely related are the forces to change groups or change position within a group to potential or actual need satisfaction. In one sense people shop around for their group memberships and purchase at the greatest source of gratification. This is probably peculiar to a mobile society like the American, and is less so when the person has some permanent and prescribed role in a group, such as his family--although even here we find adolescents preferring their peer groups. But it is especially the case when occupational groups are involved.

A number of our field studies in organizations have been concerned with the problem of labor turnover. This is conceived as the theoretical problem of why people leave groups. An earlier study in one organization used an intensive interview method with 50 employees who had left the company, matched on length of service to 50 employees who had chosen to remain (61). The theory predicted that satisfaction of needs for affiliation, achievement, recognition, autonomy and assessment would provide a key to the reasons for leaving. It was found, however, that the responses did not in fact distinguish to any satisfactory degree between those who had left and those who stayed. It appears that when people have left a group, it assumes a different meaning for them, and they are no longer capable of describing the state of their unsatisfied needs while in the group.

The current stage of this same project involves studying all the employees

in a department and measuring the strength of various needs and degree of satisfaction with the work situation (62). The analysis is taking into consideration each person's economic pressures and total life pattern, and controlling for these factors. The investigator is now patiently waiting for enough persons to leave the company to permit the final analysis of the differences between those who stayed or left the job.

In another department of the same company it was found after intensive data collection that personally insecure girls who are relatively unsuccessful in developing satisfactory interpersonal relations are among the first to leave the job (31). They leave because of failure to adjust to the job, the supervisor or the peer culture. Another type of girl that leaves early is the socially active and attractive girl, who learns to handle the job readily, but whose aspirations for membership in the most prestigious social groups are sometimes blocked because of her relative newness in the office. An experiment is being planned to reorganize work relationships in order to foster cohesive peer groups, to see if we can create sufficiently strong forces within these groups to counterbalance the forces attracting people away from the company.

### III. Trends in Group Dynamics Theory

#### 1. Movement toward greater complexity

The above review of some of the current activities of the Research Center for Group Dynamics, and our acquaintance with other research activities in the area of group behavior, suggests that certain trends may be present in this rapidly developing field. One of these is in the direction of greater

complexity of theorizing. In principle this is not a trend, since field theory specifically requires that any explanation of a particular psychological event take into consideration the entire field of interacting forces. In practice, however, this has never been done. All science is incomplete, and social science is inchoate. We conceptualize all the forces in a situation that we are aware of, or all those that we know how to think about. As progress is made, more and more of the forces are recognized and conceptualized in a precise, abstract form. Thus the trend towards a more complex theoretical formulation of group behavior may indicate that progress is being made in group dynamics, if we are recognizing the forces which really make a difference, and thinking about them in useful ways.

## 2. Increased stress on personality variables

One of the obstacles to a consideration of all the forces in a situation has been the relatively slow development of an adequate theory of personality. It is difficult to conceptualize those forces arising from the intrapersonal regions of the individual. Some progress is being made, however, in understanding which aspects of the self are relevant to social behavior. We no longer have to make the obviously incorrect assumption that personality factors cancel out in group situations, but are able increasingly to include personality variables among the forces we conceptualize and measure in our studies.

There is also some concentration on the problem of how personality interacts with task, and how individuals of different personality types interact with one another in groups. A beginning has been made in understanding how to build a group to achieve certain effects, depending upon the combination of

personality types represented by the group members (23, 26, 27, 66).

### 3. Greater awareness of forces from formal social structure

It was pointed out by Lewin a number of years ago that it would be necessary to make progress in understanding the sources of social power (42). Group dynamics now appears to be coming abreast of this foresight, as evidenced by the frequent appearance of the concept power in our review of the Center's research. There is a trend away from the study of the voluntary discussion group, the simple, homogeneous, unstructured social unit, toward the investigation of more complex, heterogeneous, formally structured social entities (4, 6). This involves the ability to conceptualize forces arising from different aspects and forms of social structure, and considerable thought is being given to this problem.

### 4. Increased formalization of theory and concepts

Mention has already been made of the attention being given by the Center to the provision of a mathematical basis for theory construction in group dynamics. There are a number of indications that this emphasis on formalization of theory and concepts represents not just a development in group dynamics, but a rapidly developing trend in social science generally. Over the past few years, the number of journal articles in this field which describe mathematical models, or in which mathematical symbols appear, has steadily increased. Even though a social scientist does not attempt to build a formal model, it is instructive to notice how many are feeling it desirable to use a semi-formal manner of stating their theories, with postulates, definitions and theorems. The seminars sponsored by the Social Science Research Council to teach mathematics to social scientists is an important

recognition of this trend toward formalization of theory, as well as an outstanding contribution toward it. The interest shown by many social scientists in the development of graph theory as a mathematical model for social science (19) indicates the generality of the trend being described. It is likely that this movement will accelerate as contributions are made and become assimilated throughout the field.

#### IV. Trends in Methods of Group Dynamics Research

Although for purposes of discussion developments in group dynamics theory and methods are treated here separately, they are essentially inseparable. Theory and methods affect each other at every stage of development. It will be noticed, therefore, that when certain trends in methods of group dynamics research are pointed out, they parallel the theoretical directions outlined in the previous section.

##### 1. Increased complexity of methods and design

Just as group dynamics theory is becoming more complex, experiments in this field are also utilizing more and more variables simultaneously. Multi-factor designs are increasingly in evidence. It is seldom that a hypothesis is tested of the form  $a = f(b)$ . More common are experiments testing hypotheses of the form:  $a = f(b)$  when  $c$  strong,  $a \neq f(b)$  when  $c$  weak. What are known as second-order and third-order variables are being explored systematically. There is, in other words, a trend toward the systematic measurement of more forces of the total field, so that interaction effects can be understood, instead of remaining content with the classical experimental model of controlling everything but one variable and observing the effects.

## 2. Bringing the field into the laboratory

With the recognition of the theoretical importance of forces arising from formal social structure has come the necessity for incorporating these real world elements into laboratory experiments. Investigators are learning how to create power positions, status differences, hierarchical levels and complex work relationships within the laboratory. Thus the complaint sometimes heard that laboratory experiments are naive in that they ignore the social structure forces and power relationships which exist in a field situation is becoming less and less justified. The trend is in the direction of developing methods for investigating complex field phenomena under more controlled laboratory conditions--of bringing the field into the laboratory.

## 3. Taking the laboratory out into the field

Although it has always been characteristic of research in group dynamics that experiments were conducted in ongoing field situations, there is a trend toward making these experiments more comparable to laboratory experiments. The variables employed are more abstract, there is a tendency toward greater precision of measurement and control, and more insistence on making experimental changes that matter. In a number of instances a laboratory-type experiment has been conducted utilizing members of an organization and pre-existing structural variables, yet sacrificing little if any of the customary laboratory precision.

I think the greater willingness of both administrators of field situations and social science investigators to conduct laboratory-type experiments in the field derives from increased understanding of social structure forces by investigators, and their resulting greater confidence that the experimental

design will not damage ongoing operations. This understanding and confidence is communicated to operating officials and leads to increased mutual trust. As this trust grows, and as social science theory and methods are improved, it is likely that the tendency to duplicate laboratory conditions in field experiments will continue to increase.

#### 4. Increased variety of research settings

It is also noticeable that the variety of field situations being studied is growing constantly. Social scientists are obtaining entry to every conceivable type of organization and institution: schools, factories, offices, hospitals, prisons, banks and coal mines, not to mention the host of situations made available for research in all the armed services. The variety of designs, measuring instruments and data-gathering procedures necessary for such diverse research situations has not proved too great for the creativity of social scientists exploring man's behavior in groups.

In any one particular study a variety of methods is often employed: interviews, questionnaires, projective tests and sociometric measures. The repertoire of research methods is expanding, as well as the ability to adapt the appropriate combination of techniques to a particular situation. This trend represents an increasing maturity of methods of research in group dynamics, in their adaptability to all facets of a complex society.

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3. Many of the items listed here are not available for general circulation. In an effort to present a relatively complete picture of work in progress at the Center, we decided to include reference to all source materials, including unpublished manuscripts, material in working draft form, or reports prepared for restricted purposes. We hope these will help the reader interested in obtaining information about the current status of a particular project or paper to get in touch with the relevant investigators.



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