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ABSTRACT

A study was conducted to explore some of the relationships existing between the early behavior of a change agent with a group client system and its subsequent effects on the helping relationship established between them. A review of related literature was made. The model of helping relationship which formed the basis for the design of the study included five key elements: (1) the task around which the relationship develops, (2) the helper with his motives, (3) the receiver of help, (4) climate in which helping activities occur, and (5) feedback. Two hypotheses were tested. Two groups were studied. The first group to undergo training was composed of 10 black women of ages ranging from 25 to 53 years; this was the control group. The second, experimental, group were 13 Black women of similar background. Each group was pretested and posttested, using a communications exercise, a measurement of group members perceptions of the change agent, and a group cohesiveness scale. Based on the results of the tests, it was found that there was a significant difference in the overall perceptions of the participants about the change agent for the time period between the pretest and the first posttest. Other results are given. (CK)

THE FLORIDA STATE UNIVERSITY

COLLEGE OF EDUCATION

# A STUDY OF SOME EFFECTS OF EARLY CHANGE AGENT BEHAVIOR ON A GROUP CLIENT SYSTEM

By
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A Dissertation submitted to the Department of Adult Education in partial fulfillment of the requirements for the degree of Doctor of Philosophy

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# CHAPTER I

## INTRODUCTION

In recent years there has been an increasing interest in programs designed to help various segments of the adult population develop their human potential. One general result of this interest has been an increasing concern with studying the changes being planned in relation to the target populations.

When examining the literature of planned change, one encounters references to agents with knowledge and ability attempting to pass on some of that knowledge and ability to persons they perceive as being in need of it and/or who have requested it. In fact, there are many professional areas where members can be considered to be change agents. These change agents are concerned with three general types of systems that may be in need of change--individual, group, and organizational (Lippitt, Watson, & Westley, 1958).

All three systems where change can occur have been subjected to investigation. However, one area that seems to need more clarification is the relationship of a change agent with a group client system, particularly when that change agent is attempting to establish a relationship through which he can help the client system.

In attending workshops, conferences or other types of gatherings, one often encounters situations in which individuals lead participants in "warm-up" or "ice-breaking" activities. Such activities generally involve verbal interaction between members of the group and/or the person in charge. Ostensibly, the activities are designed to enhance the atmosphere of the particular situation, not only through better relations among participants, but also between participants and the person in charge.

The purpose of this study was to explore some of the broad relationships found between the early behavior of a change agent with a group client system and its subsequent effects on the helping relationship established between them. An underlying assumption of this study was that groups have characteristics of their own, but that certain situational variables may alter these characteristics. Among these variables is one considered to be the psychological climate of the situation in which the group finds itself. Assuming that group climate affects the helping relationship established between the change agent and the group, it is important to devise some means to study that climate and its effect on the helping relationship.

Two indicators of a favorable climate that can be studied are the perceptions of the members of a group client system about the change agent and the cohesion to be found within the group. Essentially this means that, if the change

agent is perceived as being responsible for the climate that exists in a group, the type of helping relationship established between him and the group will be accordingly affected in a positive or negative manner. Also, since cohesion is a reflection of the mutual support, understanding and freedom of expression to be found in a group, finding that a group in which a change agent is participating is highly cohesive would indicate his acceptance by other group members. Less cohesion in the group would indicate his lack of acceptance.

More specifically, the objectives of this study were:

1. to determine the extent to which the early behavior of a change agent with a group client system affect group members' perceptions of the change agent;

2. to determine the extent to which the early behavior of a change agent with a group client system affects the cohesiveness of a group.

The early behavior of the change agent which was specifically manipulated in this study as well as the measures used to assess group member perceptions and group cohesiveness are explained in subsequent sections of this dissertation.

## Significance of the Problem

If adult members of modern, fast-moving societies are to take their proper place within those societies they

must have the knowledge, skills and attitudes that will allow them to do this to the fullest extent of their capabilities. Even though there are many persons and programs seeking clientele to be helped, they often are unable to deliver their wares because there are insufficient resources in terms of time, energy and money to go through long processes needed to establish effective helping relationships. Often the change agent has only a matter of a few days or hours in which to develop a meaningful relationship with a client system and to help effect a desired change.

Because one of the widest accepted methods of having a change agent interact with numerous persons is to bring these persons together into groups, it would seem that any means that facilitates the establishment of a helping relationship with these groups would be useful.

Specifically, verification that certain behaviors on the part of a change agent early in his relationship with a group would facilitate the attainment of the desired end with that group could have many implications for a multitude of programs relating to the education of adults in groups, no matter whether they are gathered into classes, communities or other social systems. The implications are especially important when one considers the role of change agents attempting to establish helping relationships with groups that are educationally, culturally or otherwise disadvantaged.

# CHAPTER II

## REVIEW OF LITERATURE

This chapter is divided into three sections. The first is a review of literature relevant to this study. The second part is a conceptual model used as a guide in the design of the study. The final section includes the hypotheses that were tested.

### Areas Reviewed

Included in this review of literature are many studies and references which shed some light on the climate of the relationship between the change agent and a group client system. Much of the literature is concerned with ascribed leadership in groups, particularly where it would appear that those leadership studies pertain to the establishment of a helping relationship between the leader and the group. Also taken into consideration in this review are some of the factors associated with the natural evolvement of leadership within groups since it would seem that any characteristics of a naturally evolved group leader would be conducive to the establishment of mutual understanding for a helping relationship as

characterized by the perceptions of the members of the group about the leader.

Group client system

Prior to moving into more specific examples in the literature some explanation should be provided as to what is meant by a group client system. Lippitt et al., (1958) define a client system, whether it be a person or a group, as that specific system which is being helped. For various reasons they left the term rather broad and general. However, they do explain:

> . . . it is important to remember that the word "system" always refers to an organization of interrelated parts and that when the system is a multiple-person system these parts may be various types of sub-units--individuals, roles, groups, organizations, communities [pp. 12-13].

Havelock (1970) explains that the term, system, in connection with the term, client, is used when a change agent is working with people who have common goals.

Therefore, this study uses the term, group client system, to refer to a group of people with a common goal to whom helping efforts are being directed. It is understood that individual members may have individual goals, but in order for a person to be considered a member of the group, these individual goals must coincide with and contribute to the attainment of the group's goals.

Helping relationships

In regard to helping relationships, most references in the literature seem to dwell on the communication of understanding between the change agent and the client system. Lippitt et al. (1958) discuss the establishment of the helping relationship through "ego involvement" on the part of the client system with the change agent, and this involvement places much emphasis on communications. They said, concerning the desires of a client system in building a helping relationship:

> It wants an agent who will identify himself with the client system's problems and sympathize with the system's needs and values, but who will at the same time be neutral enough to take a genuinely objective and different view of the system's predicament [p. 134].

In one study concerned with the establishment of a helping relationship between an individual and a change agent, the authors set forth two helpful principles that could be used in determining just what has taken place when a helping relationship has been established. Considering that the initial stages of contact have taken place, the authors define what they consider to be an appropriate helping relationship as one in which the client is willing (a) to maintain a relationship with the helper, and (b) to be influenced by the helper (Polansky & Kounin, 1956).

Schein (1969) talks about the establishment of the relationship between the change agent and client system in

terms of "acceptance and intimacy [p. 34]." He points out that the establishment of such a relation is much like the establishment of a norm within the system. He says there always is a source of tension until working norms have been established.

In a broad, rather general model of the helping relationship, the NTL Institute makes three observations about such a relationship:

> 1. Different names are used to designate the helping process such as counseling, teaching, guiding, training, educating, etc.
>
> 2. They have in common that the helping person is trying to influence (and therefore change) the individual who is being helped.
>
> 3. The expectation is furthermore that the direction of the change in the receiver of help will be constructive and useful to him (i.e. clarify his perceptions of the problem, bolster his self confidence, modify his behavior or develop new skills, etc.) [NTL Institute for Applied Behavioral Science, 1970, p. 69].

Group climate

An examination of the literature relating to the establishment of relationships between a change agent and his group client system invariably leads one to many descriptive or hortatory works that refer to "climate" or "atmosphere" or other variables over which the person in charge of the group supposedly has some control. Typical of this type of work is one by Knowles (1970) in which he discusses the social climate of an adult activity, placing

great emphasis on what happens during the opening session. Of primary importance during this opening session seems to be the way the teacher treats the students and the way he has prepared materials, activities and facilities. Knowles' overriding principle of participation for working with groups is: "Given a choice between two techniques, choose the one involving the students in the most active participation [p. 294]."

In an earlier work of the same type, Frank (1954) placed emphasis on organization and group setting, stressing how a group leader and group members relate to each other: "Like a physician, he must establish confidence in the group, a conviction that he can be trusted and relied upon and that he in turn will trust them and treat them with respect as personalities [p. 46]." Trecker and Trecker (1952) also talked about developing rapport between group leaders and group members. They said, "It really amounts to winning the confidence and trust of people by virtue of your complete acceptance of them [p. 3]."

In general it appears that the authors of the above works feel that a high degree of the responsibility for whatever relations develop within a group can be placed at the feet of the person who has responsibility for the group in some sort of leadership position.

This same line of thought is also evident in works such as the one by Homans (1950). In his study of natural

groups he said, "The leader brings his group from one social state to another through giving orders that govern, in greater or less degree, the behavior of the members [p. 415]." Loomis (1960) alluded to the same sort of changing social system when he said, " . . . a given collective of individuals interacting within a given social system evinces varying patterns of relations determined by the conditions of the situation and/or the functions of the relations for the system [pp. 10-11]." The role of the change agent or leader is considered to be one of the internal conditions of the situation to which group members must adapt.

In his discussion of the role of a change agent in the change process, Schein (1972) said individuals must be made to see some need for change in order to engage in the process of change. He emphasizes the role of the change agent, saying the client must perceive some need for change in himself, must be able to change, and "must perceive the influencing agent as one who can facilitate such a change in a direction acceptable to the individual [p. 48]." Shaw (1971) said that personal relationships between a leader and his followers depend on the leader's affective relations with group members, the acceptance he is able to obtain and loyalty he is able to elicit. "When the leader has good personal relations with his fellow group members the situation is more favorable for him than

when relations are poor [p. 277]." He also concluded that leader-member relations exert the strongest affect on the favorability dimension of such a relationship. Lesser affects are exerted by task structure and position power of the leader.

Leadership

In the preceding articles concerned with groups and their leaders, various characteristics and actions of the persons in charge of the groups are touched upon in terms of leadership. Because of this the area of leadership in groups will be briefly examined.

Frank (1954) said leadership has emerged as the "way groups of persons today seek their common purposes, not for or under their leaders, but with their leader [p. 62]." He discussed the role of the leader as a circular, reciprocal one in which the leader evokes the potential of others, is better accepted and develops his own potential.

This line of thought in leadership development is similar to the generalized concept of leadership discussed by Cattell (1951) in which he explained that it may be necessary to regard every member of a group, in some degree, as a leader. He explained leader roles as being responsible for finding the best way to reach a goal which the group has agreed upon and of getting the group to agree upon a goal which will give it greater satisfaction. From that

it would seem that any group member could exhibit leadership qualities. However, it would seem also that the change agent would strive to exhibit as many known leadership qualities as possible in whatever change agent/group client system relationship may develop.

Haythorn (1953) found that "individuals who are chosen by co-workers as good leaders or as persons with whom others like to work 'facilitate' group functioning, while individuals who 'depress' group functioning are not generally chosen by other members of the group [p. 283]." He also found that personality traits involving maturity, adaptability and acceptance of others tend to be positively related to smooth and effective group functioning. In another study he defined leadership as the degree to which behavior moves a group toward its goal (Haythorn, 1956).

This same idea about leadership contributing to the goals and operations of the group can be found in other works. Gordon (1955) said, " . . . whether the leader is formally designated by the group (or by someone outside the group) or spontaneously emerges, his behavior still must be perceived as facilitating to the group if he is to remain the group's leader in a psychological sense [p. 53]." In general, numerous researchers have found that contributing to group process and accomplishment of group goals enhances the leadership position of a person in a group. Some of the studies reaching similar conclusions included

those by Campbell (1956), Shartle (1951), and Stodgill (1948).

An area where one finds leadership of groups being a concern of researchers is in the classroom. Considering the classroom teacher as a change agent, it seems that studies of teacher behavior with groups is relevant to this study.

In their book on group processes in the classroom, Schmuck and Schmuck (1971) said:

> Thus classroom leadership involves interpersonal relationships and, at the same time, behavioral skills. Leadership involves behaviors in relation to others, and each student will experience a different reaction from each other student, depending on the nature of the relationship between them. The teacher who is interested in helping students improve their performance of leadership functions will need to be concerned with the students' behavioral repertoire for performing such acts as well as with the quality of the interpersonal relationships and norms that allow such behaviors to be expressed [p. 28].

Cogan (1967) concluded from his study of teacher-pupil interaction that the actions of the teacher, as perceived by the students, affected the behavior of the students.

Included in many studies and reports on leadership are considerations of the style of leadership which seem relevant in terms of the acceptance of the leader and the morale of the group, both factors which are important for the establishment of a helping relationship. Stodgill and Koehler (1952) studied the informal aspects of

leadership, finding that the behavior of commanding officers in the Navy changed working interactions. Those commanders who worked more directly with the men under their command were rated higher on a sociometric test than were those who related to subordinates through executive officers and/or did more work outside of their own unit.

Hare (1953) found that participatory leadership was more effective than supervisory leadership as a technique for changing opinion. In addition, the participatory leader generally had more influence on the group. In a later study it was found that leadership choice was related to the amount of participation and DEF interaction. DEF interaction was defined as giving suggestion; asking for suggestion, opinion or fact, and summing up and integrating (Kirscht, Lodahl, & Haire, 1959).

Flanders (1967-b) used a similar paradigm, but divided his into what were described as two kinds of influence--direct and indirect. Direct influence consists of the teacher stating his own opinion or ideas, directing pupil action, criticizing behavior or justifying authority or use of authority. "Indirect influence," he said, "consists of soliciting the opinions or ideas of the pupils, applying or enlarging on those opinions or ideas, praising or encouraging the participation of pupils, or clarifying and accepting their feelings [p. 109]." He said

direct influence may increase dependence, but there is no danger in dependence when the goals of the group are clear.

Phillips (1966) noted that most group members prefer a democratic leader who functions as an effective guide for group activities.

## Communication

In the literature reviewed thus far, one would get a general impression of the type of relationship that should exist between a change agent and a group client system. An examination of the previously mentioned studies would reveal a heavy reliance on communication, not only between the change agent or leader, but also between the members of the group.

In any social system, the role of communication cannot be minimized. In this regard, Loomis (1960) said, "Communication is a primary process basic to the articulation of each of the elements of a social system and to the unity of the whole [p. 31]."

Gordon (1955) recognized the need for communication in a properly functioning group and described it as the group's "life blood [p. 80]." His idea of communication is the sharing of meanings among members of the group. Frank (1954) felt that the function of communication in groups is to allow for effective organization and teamwork and to hold the group together in the manner of a magnet. He

seemed to be closer to a better definition when discussing some of the difficulties of leadership in a group. He said one of the main difficulties of leading a group is "to formulate some common purposes, to develop some consensus among members [pp. 42-43]."

Schmuck and Schmuck (1971) refer to communication as the vehicle by which group processes occur in the classroom. "Without it," they say, "there could be no classroom, and yet it continues to be one of the least understood features of classroom climate [p. 23]." In discussing positive social climate in a classroom, they say:

> . . . we believe that the communication in a classroom with positive social climate would involve high amounts of dialogue and feedback among members; all instructions or directions would emanate not only from the teacher, but also from students who might be assuming teacher roles temporarily. Communication would be lively, feelings of involvement would be high, and several hushed conversations might be going on simultaneously [p. 24].

Shartle (1951) found that among the dimensions of leadership was one that he referred to as "group interaction facilitation [p. 125]." In many respects he meant that a leader communicated with his followers and encouraged them to communicate also. He judged the status of communication in a group on the basis of the "frequency with which a leader provides information to members, seeks information from them, facilitates exchange of information, or shows awareness of affairs pertaining to the group [p. 124]."

Any discussion of communication, either between the change agent and the group client system or between group members will quite naturally lead into areas concerned with the interaction of these two elements. As pointed out by Leavitt (1951), "Cooperative action by a group of individuals having a common objective requires, as a necessary condition, a certain minimum of communication [p. 38]."

Flanders (1967-a), who has devoted much of his research to the study of interaction between pupils and teachers, found a casual relationship between teacher behavior and pupil attitudes. He says, "there is a direct relationship between teacher influence that encourages student participation and constructive pupil attitudes toward the teacher, the school work and the class activities [p. 224]."

In his investigations of developing interpersonal competence, Argyris (1965) found that individuals who participate more in group situations tend to learn more. He also found that those who liked the group generally tended to rate the group as being more competent.

This and Lippitt (1971) report that, when it is important for information to flow between peers, subordinate and superior, or between work units, sensitivity training in interpersonal communications can be helpful. Hare (1953) found that participatory leadership was more effective than supervisory leadership as a technique for changing

opinion. In addition, the participatory leader generally had more influence over the group.

Discussing what occurs within a group as a result of communications, Festinger (1951) said, "the attempt to have others in a group, of which one is a member, agree on a given opinion or belief or behavior pattern, leads to a process of influence among members of the group and consequent mutual adjustment of opinion [p. 29]." He concluded that the result of such a process of influence through communication is that a number of people find support for their opinions by achieving a state of relative uniformity within the group. He found that, under conditions that members are able to resist group influence, one of the causes is that there is not sufficient communication between the members and others in the group.

In a study of diadic groups, Back (1951) found that an increase in cohesiveness resulted in members making more efforts to reach agreement. He also found that discussion produced influence in that participants changed more toward the discussant's position. Lambert (1964) found that "members of a social system . . . are brought closer together psychologically if their orientations are similar, and their interaction becomes more efficient [p. 78]."

## Conceptual Model

Of central interest and importance to this study is the matter of the establishment of helping relationships.

No matter whether one takes the point of view of the sociologist, psychologist, welfare worker or adult educator, there are numerous difficulties in identifying the elements of the helping relationship.

In its simplest form, the helping relationship has been described as one "in which at least one of the parties has the intent of promoting the growth, development, maturity, improved functioning, improved coping with life of the other [Rogers, 1969, p. 154]." Although Rogers' description may be useful in inferring many aspects of a helping relationship, it really doesn't delineate the various segments.

Kolb and Boyatzis (1970) provide a model of the helping relationship that is useful in identifying the variables in such a relationship. Close examination of the model reveals an interweaving of many of the concepts examined in the preceding review of literature. They propose that their model be used "to understand more fully the dynamics of helping relationships in order to discover how these relationships may be made more effective [p. 268]."

Five key elements are identified in their model of a helping relationship, each interacting with the other to affect that relationship. These include: (1) the task or problem around which the helping relationship develops, (2) the helper with his motives and self-image, (3) the receiver of help and his motives and self-image, (4) the

environment and psychological climate in which the helping activities occur, and (5) the information feedback which occurs during the helping process. For a visualization of the model, see Figure 1.

The first element of the model, the task, can be located along a continuum. At one end of this continuum one finds assistance type tasks such as handouts where one simply satisfies the recipient's immediate expressed felt needs. At the other end of the continuum are educational tasks where the emphasis is on "developing the client's ability to solve problems like his present problem . . . by using the resources of his natural environment [Kolb & Boyatzis, 1970, p. 270]." It would seem that this latter end of the continuum is the one that should be of more interest to adult educators.

The next two elements of the model include the helper and the receiver of help. Characteristics of some concern in these two elements include the need for power, the need for affiliation and the need for achievement. Described as motives, they play a large part in how the helper and client will interact with each other. Kolb and Boyatzis (1970) say these motives come into play in the following manner:

> By asking for and/or receiving help offered, the client places himself in a dependent position, where he often feels weaker than and vulnerable to the source of help. The helper at the same time must deal with tendencies to feel superior;

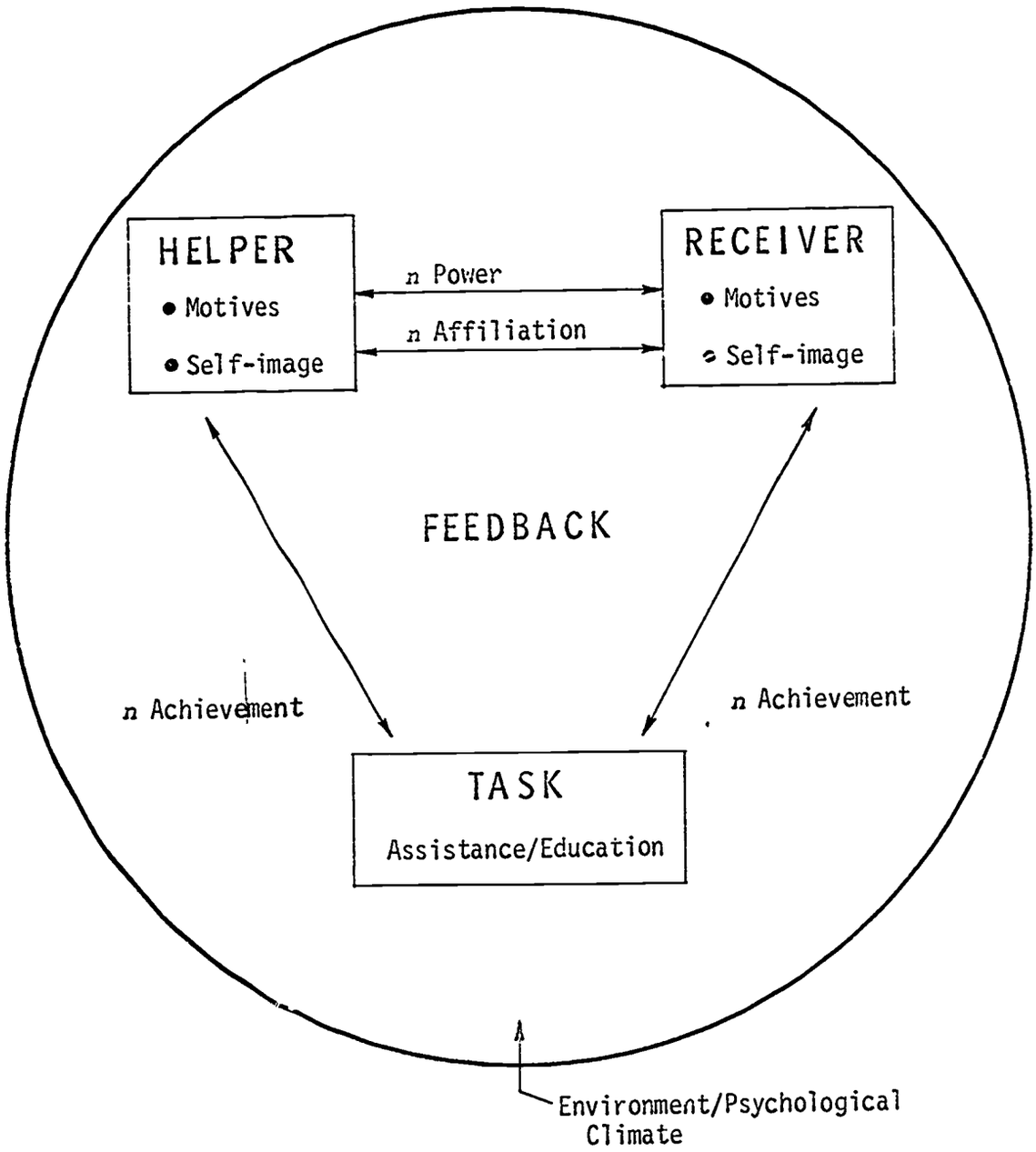



Figure 1.--Kolb and Boyatzis model for analysis of the helping relationship

> he must not allow the satisfactions of power and control to overshadow the sometimes elusive goal of acting in the client's best interest [pp. 270-271].

These characteristics of the helper and client also are involved in their perceptions of each other. The client must perceive himself as being able to improve and willing to receive help. The helper must see himself as capable of giving help, but he must not feel overwhelmingly superior to the client.

The next element in the model of a helping relationship is the environment or psychological climate. Just as the person and his characteristics influence the actions that take place in a situation, so also does the environment. Considering the motives one finds in individuals, it is possible to postulate that each person tends to act in a manner that will maximally satisfy those motives, thus influencing the environment and psychological climate. Maintaining control or tending to the environment is important in the model because, "if the environment tends to reward one motive disproportionately, it can alter the behavior of an otherwise moderately motivated helper and client [Kolb & Boyatzis, 1970, p. 273]."

The final element of the model is information feedback. Two aspects of feedback are important--the source and the characteristics of the information. The source is considered to have control over the information, therefore it controls the information that is possible to

be fed back to him. The information which is fed back takes on characteristics in the eyes of the person who has given it as well as the one who has received it. Characteristics ascribed to the original information can be very important in the helping relationship, especially in terms of perceived accuracy, applicability to the task, etc. In turn, the feedback resulting from these perceptions can alter the entire helping relationship.

Although it would seem that the preceding model is broad enough to include almost any helping relationship, some of the elements may be slightly altered when considering the helping relationship of a change agent and group client system.

When the helper in the helping relationship is a change agent other than a counselor in a one-to-one situation, the role may be somewhat different from that visualized by Kolb and Boyatzis. According to Lippitt et al. (1958), a change agent is someone who comes in from outside of a social system in order to help that system in some planned and systematic manner. They point out that this outside person may be invited in or he may take the initiative in order to establish a helping relationship. Because of the professional and imposing nature of a change agent, it would seem that personal motives would be less important than the ones expressed by the change agent as his reason for entering the client system. Taking this one step further,

it would seem that the agreed upon task and the change agent's expressed reason for entering the system should be one and the same.

Lippitt et al. (1958) seemed to recognize some of the special problems one might encounter when dealing with a group client system as opposed to other client systems. They said:

> The small group probably has more difficulty than either the individual or the organization in taking the initiative to establish a relationship with a change agent. This may be because a face-to-face group is sufficiently small as a unit to need unanimity before it can act in such important matters, yet large enough to encounter resistance and ineptness of communication when matters of delicacy arise [p. 185].

The task in the change agent/group client system relationship may also be somewhat altered. Considering that the task is the thing to be done by the group, the change agent must perceive the task in the same way as the group if he enters the system in a manner that would lead to establishment of a helping relationship. This seems to come about when the change agent imposes himself onto the group client system. Because of the nature of groups, the change agent then becomes a part of that group client system, with group members establishing perceptions about him and his role in the group.

Considering the above alterations in the model that come about from conceiving it in the context of change agent and group client system, the point of departure for

this study comes about in the variable identified by Kolb and Boyatzis as the environment and psychological climate.

The investigation centered on the climate that resulted from the role the helper (change agent) played with the helpee (group client system). This role was defined in the feedback the group members gave about their perceptions of the change agent and the group.

## Hypotheses

The preceding review of literature indicates that the most salient variables to be found in the climate of a helping relationship are concerned with the change agent and the manner in which he attempts to influence the group. Whether the leader is assigned as such to the group or he evolves from within, he is considered to be responsible for maintaining the group as such and for moving it toward the task.

Therefore, if the actions of a change agent are perceived as being helpful to the group, it would seem that the members would be inclined to react to the change agent in a different manner than if his actions were viewed as less than helpful. Also, if, as a designated leader and a member of the group, the change agent has done a good job of maintaining a favorable group atmosphere, the group members should display a high degree of cohesiveness.

As was brought out in the preceding pages, effective communication between the change agent and group members and among group members is an important influence

on the group climate. In order to test how the facilitation of communication by a change agent during the early stages of contact with the group by that change agent will affect the group members' perception of that change agent, the following hypotheses were formulated, with the experimental null hypotheses following:

1. Participation in an interpersonal communications exercise administered by a change agent to members of a group client system will result in certain behaviors of that agent being perceived by group members as being helpful to the group.

1A. There is no significant difference in the perceptual change of a group client system about selected helping behaviors of a change agent who engages the group in an interpersonal communications exercise and a group client system where there is no such training.

$1A_1$. There is no significant difference in the perceptual change of a group client system in regard to willingness to maintain a relationship with a change agent who engages a group in an interpersonal communications exercise and a group client system where there is no such training.

$1A_2$. There is no significant difference in the perceptual change of a group client system in regard to willingness to be influenced by a change agent who engages a group in an interpersonal communications exercise and a group client system where there is no such training.

2. Participation in an interpersonal communications exercise administered by a change agent to members of a group client system will result in increased cohesiveness of that group.

2A. There is no significant difference in the cohesiveness of a group client system that participates in an interpersonal communications exercise administered by a change agent and a group that has not been administered such training.

# CHAPTER III

## METHODOLOGY

For a discussion of the methodology used in this study, it should be made explicit at this point that the independent variable was participation of group members in an interpersonal communication exercise conducted by a change agent. Dependent variables examined were the group cohesion of participants and the participants' perceptions of the change agent.

The researcher received permission from the Louisiana State University Cooperative Extension Service to conduct the research in Metropolitan New Orleans with groups involved in the Expanded Food and Nutrition Education Program (EFNEP), sponsored by that agency and the United States Department of Agriculture.

It should be pointed out that, like many field research studies, the methodology of this study was designed to fit into existing conditions and procedures so the character of the situation would be altered as little as possible by the study. Nevertheless, some minor changes and adaptations in the original prospectus for the study had to be made once the researcher arrived on the scene.

## Population

The population for this study was recruited by the supervisor of the nutrition program from urban neighborhoods in New Orleans. Participants were selected to become paid paraprofessional employees for the program and the three-week training period they were required to undergo served as the circumstance for this study.

Two groups were selected. The fir t group to undergo training was composed of ten Black women of ages ranging from 25 to 53 years and educational levels ranging from 9 to 13.5 years. Hereinafter referred to as the "control" group, these participants had a mean age of 36.9 years and a mean educational level of 11.8 years.

Selected for the second or "experimental" group were 13 Black women from the same general neighborhoods as the original 10. Ages in this group ranged from 22 to 46 years and the mean age was 32.2 years. Educational levels within the group ranged from 9 to 16 years with a mean educational level of 13.1 years. See Table 1 for a comparison of ages and educational levels of the two groups.

It should be pointed out that the Expanded Food and Nutrition Education Program is aimed "at improving nutritional knowledge and dietary levels of undernourished, low-income families in this country [Jones & Verma, 1972, p. 1]." Therefore, in order to be as effective as possible

in reaching the target audience, the paraprofessionals were recruited from the same neighborhoods in which they would work. Attempts were made to recruit well-respected individuals who enjoyed some apparent leadership status.

TABLE 1

MEAN AGE AND YEARS OF FORMAL EDUCATION OF TWO GROUPS OF NEW ORLEANS E.F.N.E.P. TRAINEES, FALL 1972

| | Group I (n=10) | Group II (n=13) |
|---|---|---|
| Age | 36.9 | 32.2 |
| Education | 13.1 | 11.8 |

## Design

The experimental design for this study involved the use of a control group and an experimental group with pretests and posttests for each. Even though each group was composed of different participants, other conditions were maintained as much as possible in order to control reliability of measurements between the two groups.

Both groups were made up of individuals with similar background. Each underwent three weeks of training, but the sessions were at different periods of time. The same change agent worked with both groups, using a prescribed lesson plan. She did not know there would be any difference in the treatment of the two groups until a few days prior to beginning training the experimental group.

A pretest regarding group members' perceptions of the change agent was given on the first day of each training session after introduction of the change agent. The same instrument was administered at the end of the first and at the end of the third week of training for both groups. In addition, group cohesiveness scales were administered to both groups at the end of the first and third weeks. An experimental treatment involving a communications exercise was administered to the experimental group on the first day of training.

## Instrumentation

Three instruments were used in this study. One instrument involved the experimental treatment and the other two involved the quantification of perceptions of the group members about the change agent and the group activities. These instruments are presented as Appendix I, a communications exercise; Appendix II, group members' perceptions of the change agent, and Appendix III, group cohesiveness scale.

### Experimental treatment

The experimental treatment was a communications exercise conducted by the change agent with the experimental group during the first day of training immediately after the pretest had been administered. Generally, it was designed to establish a climate of interaction between the change

agent and members of the group and among group members themselves. The exercise (see Appendix I) that was used was entitled, "One-Way and Two-Way Communication." One of a series of exercises offered by Pfeiffer and Jones (1969), the expressed goals are:

> 1. To conceptualize the superior functioning of two-way communication through participatory demonstration.
>
> 2. To examine the application of communication in family, social, and occupation settings [p. 13].

Essentially, the exercise involves two conditions. In the first condition one person explains to the remainder of a group how to draw a series of squares and how to locate them in relation to each other. No one is allowed to question the person about the instructions being given nor make any audible responses. Also, the person giving the instructions does not face the group so he does not know how the group members are progressing nor how they are responding to instructions.

The exercise is then repeated. Under the latter condition the instructor describes another set of squares and faces the members of the group. Participants are allowed to ask questions about the instructions being given. While the exercises are being given, the observer conducting the exercise keeps up with the amount of time it takes to give instructions under both conditions. Also, a comparison is made to indicate how the two sets of drawings

compare in terms of accuracy of location. Once the exercises are over, participants discuss the results and relate some of their communications difficulties to familiar "back home" situations.

In the situation where one does not face the audience and cannot be interrupted, the transmission of information is much quicker than when facing participants and allowing them to ask questions. However, confidence in drawings by participants was lower and the drawings were not as accurate as in the latter situation.

The change agent in this study was not informed as to the nature of the study other than that it had to do with "communications." She was not given information about the experimental treatment nor the role she was to play in conducting it until after she had completed the training of the control group.

Several days prior to the time for the change agent to administer the experimental treatment with the experimental group, the researcher held a training session with her so she would be familiar with the communications exercise. The training session involved the researcher conducting the communications exercise with a group made up of members of the New Orleans E.F.N.E.P. staff, including the change agent. In the training session, the change agent was called upon to explain to other members of the group how to place the squares. This was done under the two conditions

of the exercise as explained above. The researcher acted as the person conducting the exercise and kept up with the time and accuracy under both conditions.

The training session concluded with a discussion of how allowing open discussion and questioning would prolong the transmission of information, but how it also would increase accuracy and confidence. Also discussed was how and when the change agent would conduct the exercise with the experimental group.

On the first day of training for the experimental group, the change agent and administrators were introduced and the pretest was administered in the same manner as had been done for the control group. This was immediately followed by the change agent conducting the communications exercise with the members of the experimental group.

A member of the experimental group was selected by the group members to explain to the remainder of the group how to place the squares. The change agent did all the explaining about what was to be done, then acted as the observer to record time and accuracy. The change agent also acted as discussion leader at the conclusion of the exercise, attempting to relate the exercise to some real-life experiences the participants might have had in the past and to some they might have with their clientele when going to the field as workers. Following this, the actual training and presentation of subject matter began for the

experimental group.

The control group did not participate in any exercise that might be construed as enhancing interpersonal communications.

Perceptions of change agent

In order to gather information about the perceptions of the two groups about the change agent, an instrument was developed, based on the two components of a helping relationship as set forth by Polansky and Kounin (1956). The two components of this helping relationship include: (a) to maintain a relationship with the helper, and (b) to be influenced by the helper.

Development of this instrument was done by structuring a series of statements, responses to which would indicate a person's perceptions about a given individual in relation to one of the above components. In addition, the questions had to be related to the situation in which the respondents found themselves so they would seem relevant.

Five statements relating to each of the two components were structured to measure the perceptions of the group members. It was felt that more questions relating to the components might contribute to the validity of the instrument, but the length of time it might take to respond would make it awkward to administer.

The instrument was structured so that each person

would mark a place on a scale that would indicate the degree of agreement with the statement. This would allow for degrees of feeling and not force a person into the position of having to make a total commitment one way or the other.

No numbers were placed along the scale so respondents could not infer any values for responding a certain way. Appendix II is a reproduction of the instrument used to measure these components. When scoring the instrument, values of one through six were placed on the six spaces with the highest score going for the greatest degree of agreement by the respondent. A possible score of 60 could be made on this instrument. Scores of 30 each could be made on each of the two sets of questions relating to the components of a helping relationship. Therefore, three separate scores could be derived from each instrument. One was an overall score of the r. .cipants' perceptions of the change agent and the other two related to individual components that interrelated to yield the overall score.*

Once the respondents had indicated their responses to the change agent on the instrument designed for that purpose, the three scores were determined--one overall score, a score for the willingness of the respondent to maintain a relationship with the change agent, and a third

* For the purposes of this study, it is assumed that the instrument questions are logically and consistently related, thus providing face validity.

score for the willingness of the respondent to be influenced by the change agent.

However, this study involved the testing of hypotheses relating to the differences in perception between two time periods as well as two groups. Therefore, the raw data from the pretest was subtracted from that of subsequent tests to arrive at a difference score for each group. These difference scores were subjected to statistical analysis to determine if there were any significant differences in the two groups.

To be more explicit, a score was recorded when the pretest was given to each group. Subsequently, another score was recorded when the first posttest was given at the end of the first week of training for the two groups, then again when the second posttest was given at the end of the third week of training.

Since the study involved the determination of differences in change from one time to another, the first score was subtracted from the second for each participant to yield a difference score. The difference score calculated for each individual in both groups were ranked and subjected to the statistical test mentioned above. This same procedure was carried out to determine difference scores between the pretest and the second posttest; then between the second posttest and the final posttest. In addition, the same procedure was carried out with the components to determine

significant differences for them.

The same statistical test was used to analyze the data from the cohesiveness scale where the numbers one through nine were assigned with the highest coinciding with the respondents' greatest degree of cohesiveness. Since it was assumed that there was no group cohesiveness at the beginning of the training session, there was no pretest administered in regard to group cohesion. Therefore, assuming that the participants started at a cohesion level of zero, the scores recorded at the end of the first week of training represented the change after one week. These were the scores subjected to statistical analysis. The same was true for the scores recorded at the end of the third week of training which represented the total change over the whole period.

The following is a listing of the questions used to measure the components of the helping relationship:

A. To maintain a relationship with the helper.

1. The teachers in this project are persons I would like to know better socially.
2. The teachers have eliminated doubts I had about participating in this project.
3. I would like the teachers to be available to help me whenever I have problems after I begin working in the neighborhoods.
4. If I quit this project now, I would miss by association with the teachers.

5. I feel I might need further training by the teachers after completing this three-week training period.

B. To be influenced by the helper.

1. The information the teachers have given me will be helpful when I begin working in the neighborhoods.

2. The teachers in this project have changed my mind about many things relating to foods and nutrition.

3. The teachers in this project are capable of helping me learn how to teach people about nutrition.

4. When working in the neighborhoods I plan to act the way the teachers tell us to as much as possible.

5. I would take the advice of the teachers on matters besides the nutrition project.

Group cohesiveness

The instrument used to test the cohesiveness of the group was called the University of Oklahoma Group Cohesiveness Scale (Pankowski, 1972). In general it is designed to test group cohesion by having group members respond to questions about the group and the role they, as group members, played in the group. The instrument is reproduced as Appendix III.

## Data Collection

Collection of data from the two groups was done at three separate times for each group. In all cases it was done at the location where the change agent was working with the group members, but the instruments were administered by

the researcher. Special care was taken to assure group participants that their responses about their perceptions of the change agent would not be available to the change agent nor could they be traced to the participants.

Since the study was not designed to correlate any face data about individuals with responses, no names were placed on the instruments. Instead, each group participant was allowed to draw a number out of an envelope. She then wrote that number on each instrument she filled out.

Even though the study involved the perceptions of individuals as members of a group, it was important to at least keep up with them by number in case any member dropped out or was absent on the day data was collected. The fears were unfounded since no participant was absent on any day an instrument was administered.

Data relative to the establishment of a helping relationship was gathered on the first day of the three-week training session after the paraprofessionals had been greeted by administrators of the LSU Cooperative Extension Service in New Orleans and after they had been introduced to the agent who was to be their teacher, the change agent. The pretests were given at this time so the participants would have some basis for responding to the statements in the instrument. It was felt this was necessary so they would have had the chance to form some kind of opinion about the change agent and would not be responding in a

random fashion.

Collection of data from the control group was done on October 2, 6 and 19, 1972; from the experimental group on November 6, 10 and 27, 1972. The additional time between the second and third dates for the experimental group was caused by the Thanksgiving holidays. Final posttest data was collected after the holidays because the stage of their instruction was the same at that time as it had been for the control group. In general, it was done to control the reliability of the study as much as possible.

Posttest data were collected at the end of the first and third weeks to determine if any effects of the experimental treatment were different after a relatively short period of time (one week) and after a relatively long time period (three weeks). No data was gathered at the end of the second week because the groups were involved in field experiences at that time and it would have been impossible to meet with them to administer the instruments.

The gathering of data relative to group cohesiveness was done at the end of the first and third weeks of training for both groups. Since most group members did not know each other and since they had not had time to interact and participate in the behaviors to be measured, no pretest was administered at the beginning of training on the University of Oklahoma Group Cohesiveness Scale.

## Data Analysis

After consultation with a member of the Statistical Consulting Service at Florida State University, a nonparametric test was selected as being most appropriate for analyzing the data of this study, because the conditions for selecting participants and testing them would not fit the assumptions necessary for a parametric test.

Even though the two groups were made up of persons selected from the same general population, it could not be assumed that they were related nor that they were drawn at random. Therefore, the test selected for use in analyzing the data was: "A rank test for two independent samples" as described by Ferguson (1966, pp. 358-360).

This test ranks the data generated from both groups of respondents, then tests it to determine if there is a significant difference in the sums of ranks from the two groups. The calculations of the test are designed to determine the deviation of the responses from the value expected on the assumption that the samples are drawn from the same population. The resultant value is a $z$ score which, if it deviates significantly from a normal distribution, results in the rejection of the hypothesis being tested.

# CHAPTER IV

## PRESENTATION OF FINDINGS

In testing the hypotheses of this study, the previously cited rank test for two independent samples was used in order to reach a decision about whether to retain or reject the experimental null hypotheses. A significance level of .05 was established as the level of rejection. Two main hypotheses were tested. One dealt with group members' perceptions of the change agent and the other dealt with group cohesion. Additional tests were made of the former hypothesis by formulating null hypotheses relating to components that were assumed to contribute to the overall perceptions of the group members about the change agent.

### Perceptions of Change Agent

The experimental null hypothesis that related to the group members' overall perceptions of the change agent was:

> There is no significant difference in the perceptions of a group client system about selected helping behaviors of a change agent who engages the group in an interpersonal communications exercise and a group client system where there is no such training.

Data generated by participants through the instrument for this portion of the study are shown in Table 2 for each period when it was administered. Total group scores as well as group mean scores also are given.

TABLE 2

GROUP MEAN OVERALL PERCEPTION SCORES

| | Pretest | | Posttest 1 | | Posttest 2 | |
|---|---|---|---|---|---|---|
| | Control | Exper. | Control | Exper. | Control | Exper. |
| | 30 | 33 | 55 | 44 | 50 | 45 |
| | 48 | 50 | 58 | 55 | 55 | 55 |
| | 48 | 35 | 50 | 53 | 53 | 45 |
| | 44 | 35 | 44 | 55 | 53 | 55 |
| | 37 | 35 | 47 | 52 | 53 | 54 |
| | 44 | 25 | 55 | 53 | 57 | 49 |
| | 43 | 44 | 51 | 53 | 51 | 42 |
| | 48 | 35 | 58 | 59 | 57 | 40 |
| | 39 | 52 | 42 | 55 | 50 | 53 |
| | 42 | 31 | 48 | 46 | 44 | 48 |
| | | 28 | | 44 | | 46 |
| | | 40 | | 52 | | 55 |
| | | 44 | | 54 | | 51 |
| TOTALS | 423 | 487 | 508 | 675 | 523 | 638 |
| MEANS | 42.3 | 37.5 | 50.8 | 51.9 | 52.3 | 49.1 |

A graph which summarizes the changes in group mean scores and which illustrates the differences between the two groups is presented as Figure 2. The group mean score for the control group was 42.3 for the pretest, then went to 50.8 at the time of the first posttest and ended at 52.3.

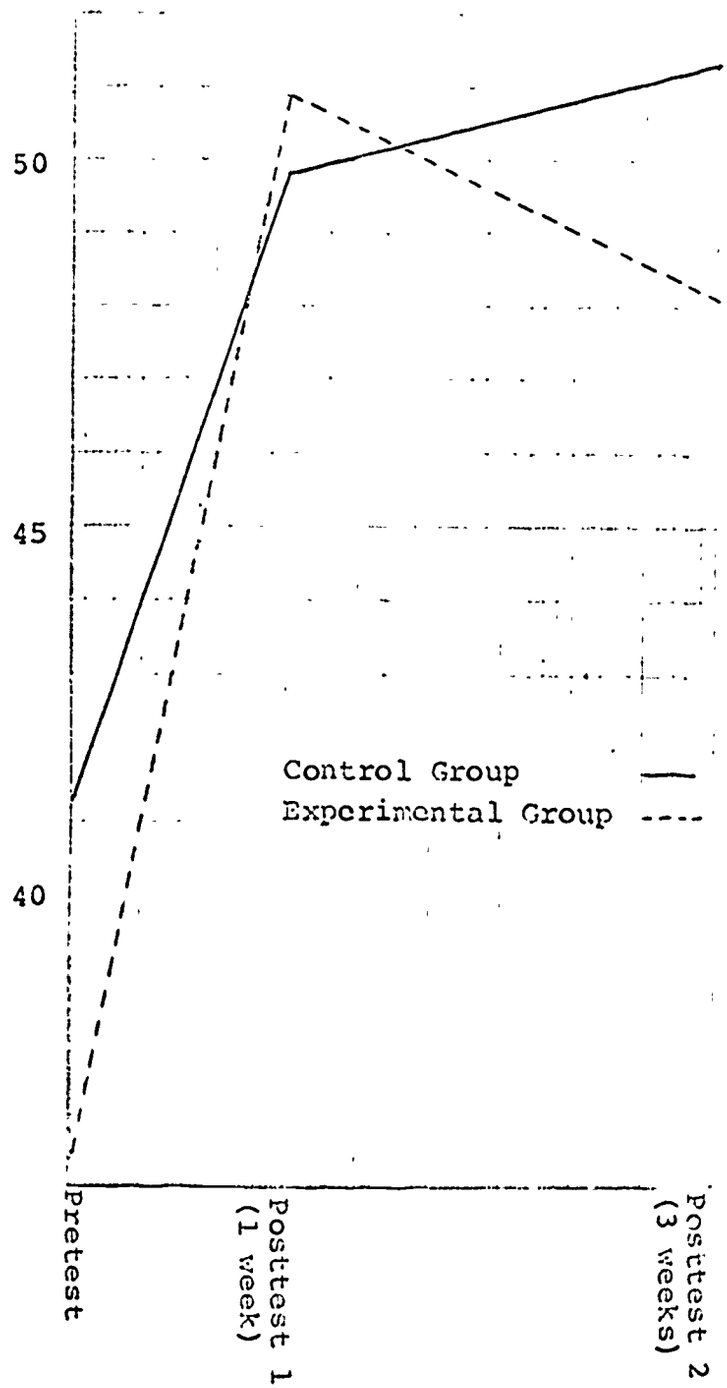



Figure 2.--Group mean overall perception scores

Group mean scores for the experimental group started at 37.5, then went to 51.9 for the first posttest and ended at 49.1. In other words, the experimental group started at a lower point than the control group, but reported higher group mean scores at the first posttest given at the end of the first week. The control group mean scores improved slightly at the final posttest, but the experimental group mean score was lower.

In order to subject this data to statistical analysis, it was necessary to compute difference scores for each respondent in the two groups. As explained in Chapter III, these difference scores were obtained by finding the difference between perception scores recorded for the pretest and those recorded for the first posttest. The same procedure was followed to find the difference between the pretest and the second posttest scores; then the difference between the first posttest and the final posttest scores. The testing of the hypothesis for three different time periods was designed to yield a clearer picture of the perceptual changes that occurred in the groups during the training period.

Table 3 presents these difference scores in addition to the ranks of these differences for each test period. There were 23 ranks for the data, corresponding to the total number of participants in the two groups. Where there were ties in difference scores, ranks were

TABLE 3

SUMS OF RANKS OF DIFFERENCES IN CONTROL AND EXPERIMENTAL GROUP CHANGES IN OVERALL PERCEPTIONS OF CHANGE AGENT

| P | | | | $P_1$ | | | | $P_2$ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Control Group (N=10) | | Exper. Group (N=13) | | Control Group (N=10) | | Exper. Group (N=13) | | Control Group (N=10) | | Exper. Group (N=13) | |
| Diff. | Rank | Diff. | Rank | Diff. | Rank | Diff. | Rank | Diff. | Rank | Diff. | Rank |
| 25 | 22 | 11 | 13.5 | 20 | 21.5 | 12 | 14 | -5 | 4 | 1 | 14 |
| 10 | 10.5 | 5 | 5 | 7 | 7.5 | 5 | 5 | -3 | 7.5 | 0 | 12 |
| 2 | 2 | 18 | 19 | 5 | 5 | 10 | 12 | 3 | 19.5 | -8 | 3 |
| 0 | 1 | 20 | 20 | 9 | 10.5 | 20 | 21.5 | 9 | 23 | 0 | 12 |
| 10 | 10.5 | 17 | 18 | 16 | 17 | 19 | 20 | 6 | 21 | 2 | 16.5 |
| 11 | 13.5 | 28 | 23 | 13 | 15 | 24 | 23 | 2 | 16.5 | -4 | 5.5 |
| 8 | 7 | 9 | 8 | 8 | 9 | -2 | 1 | 0 | 12 | -11 | 2 |
| 10 | 10.5 | 24 | 21 | 9 | 10.5 | 5 | 5 | -1 | 10 | -19 | 1 |
| 3 | 3.5 | 3 | 3.5 | 11 | 13 | 3 | 2 | 8 | 22 | -2 | 9 |
| | 6 | 15 | 16 | 2 | 3 | 17 | 18 | -4 | 5.5 | 2 | 16.5 |
| | | 16 | 17 | | | 18 | 19 | | | 2 | 16.5 |
| | | 12 | 15 | | | 15 | 16 | | | 3 | 19.5 |
| R=86.5 | | 10 | 10.5 | R=112.0 | | 7 | 7.5 | R=141.0 | | -3 | 7.5 |
| E=120 | | | | E=120 | | | | E=120 | | | |
| | | R=189.5 | | | | R=164.0 | | | | R=135.0 | |
| | | E=156 | | | | E=156 | | | | E=156 | |

R=Sum of ranks
E=Expected sum of ranks

P=First posttest less pretest scores
$P_1$=Second posttest less pretest scores
$P_2$=Second posttest less first posttest scores

assigned the average of the ranks they would have been assigned if they had differed. Also, since ties were fairly numerous, a correction was applied to the calculations (Ferguson, 1966, p. 360).

Results of the application of the statistical test are shown in Table 4 in the form of standard, z, scores which the test is designed to yield. A standard score is a deviation from the mean divided by the standard deviation. In effect it means the standard deviation is used as a unit of measurement (Ferguson, 1966, p. 73).

TABLE 4

STANDARD SCORES OF DIFFERENCES IN CONTROL AND EXPERIMENTAL GROUP CHANGE IN OVERALL PERCEPTIONS OF CHANGE AGENT

| P | $P_1$ | $P_2$ |
|---|---|---|
| $z=2.146^*$ | $z= .559$ | $z=1.246$ |

*=$p < .05$ P=Analysis of 1st posttest less pretest scores
$P_1$=Analysis of 2nd posttest less pretest scores
$P_2$=Analysis of 2nd posttest less first posttest scores

Based on the standard scores as reported in Table 4, using the .05 level of significance, the experimental null hypothesis relating to overall perceptions of the change agent was rejected for the time period between the pretest and the first posttest (P). The statistical analysis indicated the experimental null hypothesis could not be

rejected for the time period between the pretest and the second posttest ($P_1$), nor for the time period between the first posttest and the final posttest ($P_2$).

In other words the statistical test applied to the data indicated that there were significant differences in the perceptions of the two groups about the change agent after one week of training. However, these differences were not apparent after three weeks of training, nor were they apparent for the time period between the first and third week of training.

Maintaining a relationship

Because the instrument regarding the perceptions of the change agent was constructed from two components, data relating to these two components were extracted from the overall scores and subjected to statistical analysis. The first of these components concerned the perceptions of the group members in regard to their willingness to maintain a relationship with the change agent. To facilitate further reference, this concept will be referred to as the "relationship maintenance" component.

In order to test this component, a secondary null hypothesis relating to the overall hypothesis was formulated for testing purposes. This hypothesis was:

There is no significant difference in the perceptions of a group client system in regard to willingness to maintain a relationship with a change agent who engages a group in an interpersonal communications exercise and a group client system where there is no such training.

Data generated by participants through the instrument for this component of the study are shown in Table 5 for each period when the test was administered. Total group scores for the relationship maintenance component as well as group mean scores are given.

TABLE 5

GROUP MEAN RELATIONSHIP MAINTENANCE COMPONENT SCORES

| | Pretest | | Posttest 1 | | Posttest 2 | |
|---|---|---|---|---|---|---|
| | Control | Exper. | Control | Exper. | Control | Exper. |
| | 20 | 17 | 30 | 24 | 25 | 24 |
| | 22 | 20 | 30 | 30 | 30 | 30 |
| | 25 | 20 | 30 | 29 | 29 | 25 |
| | 19 | 20 | 24 | 30 | 28 | 30 |
| | 19 | 16 | 25 | 28 | 28 | 28 |
| | 19 | 11 | 29 | 28 | 30 | 27 |
| | 18 | 25 | 27 | 27 | 26 | 23 |
| | 19 | 15 | 30 | 29 | 29 | 25 |
| | 18 | 23 | 20 | 28 | 27 | 28 |
| | 19 | 18 | 23 | 23 | 26 | 26 |
| | | 16 | | 24 | | 24 |
| | | 18 | | 26 | | 27 |
| | | 19 | | 29 | | 28 |
| TOTALS | 198 | 238 | 268 | 355 | 278 | 345 |
| MEANS | 19.8 | 18.3 | 26.8 | 27.3 | 27.8 | 26.5 |

These data show that the group mean score for the control group was 19.8 for the pretest, then went to 26.8 at the time of the first posttest and ended at 27.8. Group mean scores for the experimental group began at 18.3, then went to 27.3 for the first posttest and ended at 26.5.

Figure 3 illustrates that the experimental group started at a lower point than the control group, but had a slightly higher score at the time of the first posttest. At the time of the final posttest, the control group mean score was higher than that of the experimental group.

Table 6 presents the difference scores in the same manner as for the overall scores. Results of the application of the statistical test to these data are shown in Table 7 in the form of standard, $z$, scores.

Based on the standard scores as reported in Table 7, using the .05 level of significance, the experimental null hypothesis relating to the perceptions of group members in regard to the relationship maintenance component of a helping relationship could not be rejected for any of the three time periods tested (P, $P_1$ and $P_2$).

In other words, the statistical test applied to the data indicated that there were no significant differences in the perceptions of the two groups about the change agent at any phase of the training tested in regard to the relationship maintenance component.

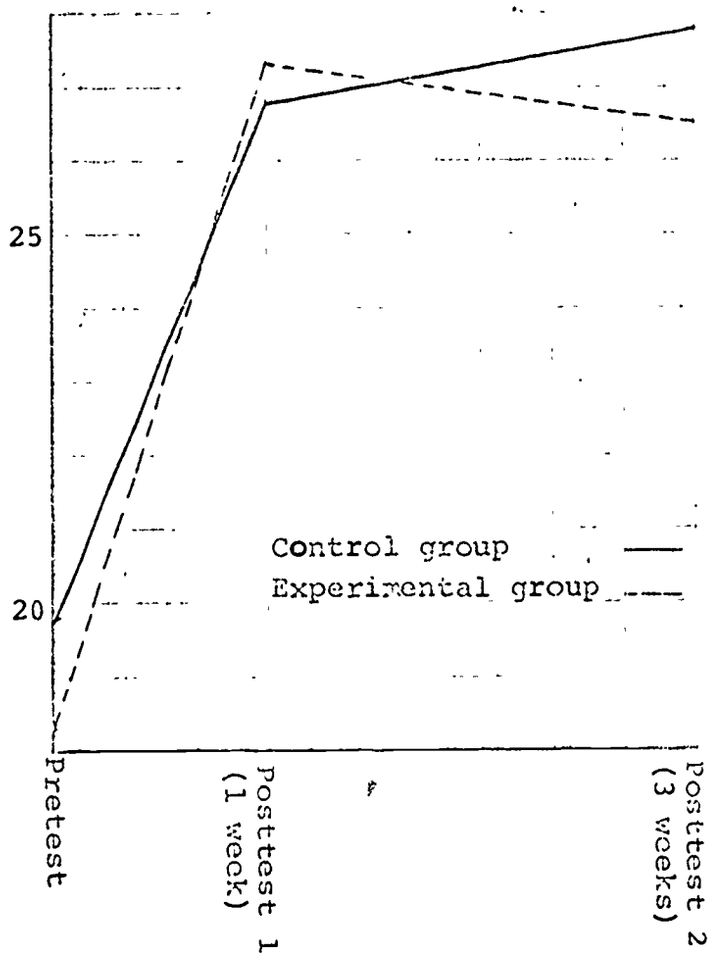



Figure 3.--Group mean relationship maintenance component scores

TABLE 6

SUMS OF RANKS OF DIFFERENCES IN CONTROL AND EXPERIMENTAL GROUP CHANGES IN RELATIONSHIP MAINTENANCE COMPONENT PERCEPTIONS OF CHANGE AGENT

| P | | | | $P_1$ | | | | $P_2$ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Control Group (N=10) | | Exper. Group (N=13) | | Control Group (N=10) | | Exper. Group (N=13) | | Control Group (N=10) | | Exper. Group (N=13) | |
| Diff. | Rank | Diff. | Rank | Diff. | Rank | Diff. | Rank | Diff. | Rank | Diff. | Rank |
| 10 | 17 | 7 | 9 | 5 | 4 | 7 | 6.5 | -5 | 1 | 0 | 13 |
| 8 | 11 | 10 | 17 | 8 | 9.5 | 10 | 18.5 | 0 | 13 | 0 | 13 |
| 5 | 5.5 | 9 | 13.5 | 4 | 2 | 5 | 4 | -1 | 7 | -4 | 3 |
| 5 | 5.5 | 10 | 17 | 9 | 14 | 10 | 18.5 | 4 | 22 | 0 | 13 |
| 6 | 8 | 12 | 21 | 9 | 14 | 12 | 22 | 3 | 20 | 0 | 13 |
| 10 | 17 | 17 | 23 | 11 | 21 | 16 | 23 | 1 | 17.5 | -1 | 7 |
| 9 | 13.5 | 2 | 1.5 | 8 | 9.5 | -2 | 1 | -1 | 7 | -4 | 3 |
| 11 | 20 | 14 | 22 | 10 | 18.5 | 10 | 18.5 | -1 | 7 | -4 | 3 |
| 2 | 1.5 | 5 | 5.5 | 9 | 14 | 5 | 4 | 7 | 23 | 0 | 13 |
| 4 | 3 | 5 | 5.5 | 7 | 6.5 | 8 | 9.5 | 3 | 20 | 3 | 20 |
| | | 8 | 11 | | | 8 | 9.5 | | | 0 | 13 |
| | | 8 | 11 | | | 9 | 14 | | | 1 | 17.5 |
| R=102.0 | | 10 | 17 | R=113.0 | | 9 | 14 | R=137.5 | | -1 | 7 |
| E=120 | | | | E=120 | | | | E=120 | | | |
| | | R=174.0 | | | | R=163.0 | | | | R=138.5 | |
| | | E=156 | | | | E=156 | | | | E=156 | |

R=Sum of ranks
E=Expected sum of ranks

P=First posttest less pretest scores
$P_1$=Second posttest less pretest scores
$P_2$=Second posttest less first posttest scores

TABLE 7

STANDARD SCORES OF DIFFERENCES IN CONTROL AND EXPERIMENTAL GROUP CHANGES IN RELATIONSHIP MAINTENANCE COMPONENT PERCEPTIONS OF CHANGE AGENT

| P | $P_1$ | $P_2$ |
|---|---|---|
| $z$=1.189 | $z$= .501 | $z$=1.050 |

P=Analysis of 1st posttest less pretest scores
$P_1$=Analysis of 2nd posttest less pretest scores
$P_2$=Analysis of 2nd posttest less 1st posttest scores

Willingness to be influenced

The second component of group members' perceptions of change agents was the willingness of group members to be influenced by the change agent. To facilitate further reference, this concept will be referred to as the "influence willingness" component.

In order to test this component, another secondary null hypothesis relating to the overall hypothesis was formulated for testing purposes. This hypothesis was:

> There is no significant difference in the perceptions of a group client system in regard to willingness to be influenced by a change agent who engages a group in an interpersonal communications exercise and a group client system where there is no such training.

Data generated by participants through the instrument for this component of the study are shown in Table 8 for each period when the test was administered. Total group scores for the influence willingness component as well as group mean scores are given.

TABLE 8

GROUP MEAN INFLUENCE WILLINGNESS COMPONENT SCORES

| | Pretest | | Posttest 1 | | Posttest 2 | |
|---|---|---|---|---|---|---|
| | Control | Exper. | Control | Exper. | Control | Exper. |
| | 10 | 16 | 25 | 20 | 25 | 21 |
| | 26 | 30 | 28 | 25 | 25 | 25 |
| | 23 | 15 | 20 | 24 | 24 | 20 |
| | 25 | 15 | 20 | 25 | 25 | 25 |
| | 18 | 19 | 22 | 24 | 25 | 26 |
| | 25 | 14 | 26 | 25 | 27 | 22 |
| | 25 | 19 | 24 | 26 | 25 | 19 |
| | 29 | 20 | 28 | 30 | 28 | 15 |
| | 21 | 29 | 22 | 27 | 23 | 25 |
| | 23 | 13 | 25 | 23 | 18 | 22 |
| | | 12 | | 20 | | 22 |
| | | 22 | | 26 | | 28 |
| | | 25 | | 25 | | 23 |
| TOTALS | 225 | 249 | 240 | 320 | 245 | 293 |
| MEANS | 22.5 | 19.2 | 24.0 | 24.6 | 24.5 | 22.5 |

These data indicate that the group score of the control group for the pretest was 22.5, then went to 24.0 for the first posttest, and ended at 24.5. Group mean scores for the experimental group started at 19.2, then went to 24.6 for the first posttest and ended at 22.5.

Figure 4 illustrates that the experimental group started at a lower point than did the control group, but had a slightly higher mean score at the time of the first posttest. At the time of the final posttest, the control group mean score was higher than the experimental group mean score.

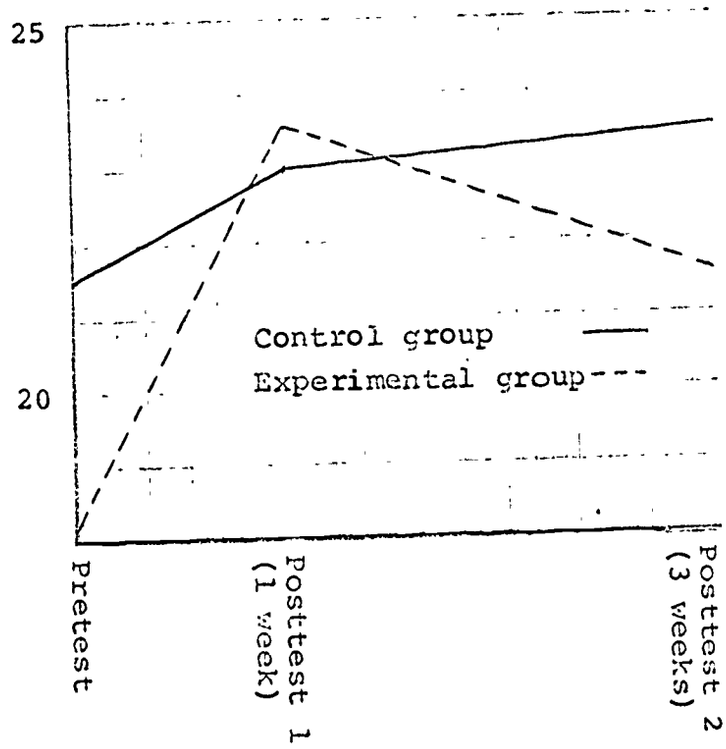



Figure 4.--Group mean influence willingness component scores

Table 9 presents the difference scores in the same manner as for the overall scores. Results of the application of the statistical test to these data are shown in Table 10.

Based on the standard scores as reported in Table 10, using the .05 level of significance, the experimental null hypothesis relating to the perceptions of group members in regard to the influence willingness component of a helping relationship was rejected for the time period between the pretest and the first posttest (P). The statistical analysis indicated the experimental null hypothesis could not be rejected for the time period between the pretest and the second posttest ($P_1$), nor for the time period between the first posttest and the final posttest ($P_2$).

In other words the statistical test applied to the data for this component indicated that there were significant differences in the perceptions of the two groups about the change agent in regard to their willingness to be influenced by her after one week of training. However, these differences were not apparent after three weeks of training, nor were they apparent for the time period between the first and third week of training.

TABLE 9

SUMS OF RANKS OF DIFFERENCES IN CONTROL AND EXPERIMENTAL GROUP CHANGES IN INFLUENCE MAINTENANCE COMPONENT PERCEPTIONS OF CHANGE AGENT

| P | | | | $P_1$ | | | | $P_2$ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Control Group (N=10) | | Exper. Group (N=13) | | Control Group (N=10) | | Exper. Group (N=13) | | Control Group (N=10) | | Exper. Group (N=13) | |
| Diff. | Rank | Diff. | Rank | Diff. | Rank | Diff. | Rank | Diff. | Rank | Diff. | Rank |
| 15 | 23 | 4 | 13 | 15 | 23 | 5 | 13.5 | 0 | 11.5 | 1 | 15.5 |
| 2 | 10.5 | -5 | 1.5 | -1 | 6 | -5 | 2 | -3 | 5.5 | 0 | 11.5 |
| -3 | 3 | 9 | 18 | 1 | 10 | 5 | 13.5 | 4 | 22 | -4 | 4 |
| -5 | 1.5 | 10 | 20 | 0 | 8 | 10 | 21.5 | 5 | 23 | 0 | 11.5 |
| 4 | 13 | 5 | 15 | 7 | 16.5 | 7 | 16.5 | 3 | 21 | 2 | 19 |
| 1 | 8.5 | 11 | 22 | 2 | 11.5 | 8 | 18 | 1 | 15.5 | -3 | 5.5 |
| -1 | 5.5 | 7 | 16 | 0 | 8 | 0 | 8 | 1 | 15.5 | -7 | 2.5 |
| -1 | 5.5 | 10 | 20 | 9 | 19.5 | -5 | 2 | 0 | 11.5 | -15 | 1 |
| 1 | 8.5 | -2 | 4 | 2 | 11.5 | -4 | 4 | 1 | 15.5 | -2 | 7.5 |
| 2 | 10.5 | 10 | 20 | -5 | 2 | 9 | 19.5 | -7 | 2.5 | -1 | 9 |
| | | 8 | 17 | | | 10 | 21.5 | | | 2 | 19 |
| | | 4 | 13 | | | 6 | 15 | | | 2 | 19 |
| | R=89.5 | 0 | 7 | | R=116.0 | -2 | 5 | | R=143.5 | -2 | 7.5 |
| | E=120 | | | | E=120 | | | | E=120 | | |
| | | | R=186.5 | | | | R=160.0 | | | | R=132.5 |
| | | | E=156 | | | | E=156 | | | | E=156 |

R=Sum of ranks
E=Expected sum of ranks

P=First posttest less pretest scores
$P_1$=Second posttest less pretest scores
$P_2$=Second posttest less first posttest scores

TABLE 10

STANDARD SCORES OF DIFFERENCES IN CONTROL AND EXPERIMENTAL GROUP CHANGES IN RELATIONSHIP MAINTENANCE COMPONENT PERCEPTIONS OF CHANGE AGENT

| P | $P_1$ | $P_2$ |
|---|---|---|
| $z$=1.959* | $z$= .311 | $z$=1.405 |

*=$p < .05$ P=Analysis of 1st posttest less pretest scores
$P_1$=Analysis of 2nd posttest less pretest scores
$P_2$=Analysis of 2nd posttest less 1st posttest scores

Group Cohesiveness

The experimental null hypothesis relating to group cohesiveness was:

> There is no significant difference in the cohesiveness of a group client system that participates in an interpersonal communications exercise administered by a change agent and a group that has not been administered such training.

Data generated by participants through the instrument for this portion of the study are shown in Table 11. Since no pretest was given for group cohesiveness, there are scores for only two times--after the first week of training and after the third week of training. Both groups included the change agent for this test since she was assumed to have been a member of the group and to have affected the cohesiveness.

The mean score at the time of the first group cohesiveness test was 49.2 for the control group and 46.5 for the experimental group. At the time the second group cohesiveness test was administered at the end of the third

TABLE 11

GROUP MEAN COHESIVENESS SCORES AND SUMS OF RANKS OF SCORES

C

| Control Group (N=11) | | Exper. Group (N=14) | |
|---|---|---|---|
| Score | Rank | Score | Rank |
| 54 | 24.5 | 49 | 12.5 |
| 54 | 24.5 | 46 | 9.5 |
| 53 | 22.5 | 53 | 22.5 |
| 49 | 12.5 | 45 | 7 |
| 45 | 7 | 50 | 16 |
| 50 | 16 | 49 | 12.5 |
| 51 | 18.5 | 45 | 7 |
| 49 | 12.5 | 50 | 16 |
| 41 | 3.5 | 52 | 20.5 |
| 44 | 5 | 39 | 2 |
| 51 | 18.5 | 52 | 20.5 |
| | | 34 | 1 |
| | | 46 | 9.5 |
| | | 41 | 3.5 |
| X=541 | R=165.0 | X=651 | R=160.0 |
| $\bar{X}$=49.2 | E=143 | $\bar{X}$=46.5 | E=182 |

$C_1$

| Control Group (N=11) | | Exper. Group (N=14) | |
|---|---|---|---|
| Score | Rank | Score | Rank |
| 52 | 21 | 48 | 14 |
| 38 | 3 | 38 | 3 |
| 53 | 22 | 46 | 9.5 |
| 48 | 14 | 31 | 1 |
| 54 | 24 | 48 | 14 |
| 54 | 24 | 44 | 5.5 |
| 54 | 24 | 45 | 7.5 |
| 44 | 5.5 | 49 | 16 |
| 38 | 3 | 46 | 9.5 |
| 50 | 18 | 47 | 11.5 |
| 50 | 18 | 51 | 20 |
| | | 45 | 7.5 |
| | | 47 | 11.5 |
| | | 50 | 18 |
| X=535 | R=176.5 | X=635 | R=148.5 |
| $\bar{X}$=48.6 | E=143 | $\bar{X}$=45.4 | E=182 |

X=Total group score
$\bar{X}$=Mean group score
R=Sum of ranks
E=Expected sum of ranks
C=First cohesiveness test
$C_1$=Second cohesiveness test

week of training the mean score for the control group was 48.6 and for the experimental group it was 45.4. It was apparent that both groups increased in cohesiveness up until one week after training began, then both declined slightly.

In addition to the mean score, Table 11 also includes the rankings of scores of the two groups used in statistical analysis of differences in cohesion. Results of testing these data are shown in Table 12 in the form of standard, z, scores.

TABLE 12

STANDARD SCORES OF DIFFERENCES IN COHESIVENESS

| C | $C_1$ |
|---|---|
| z=1.155 | z=1.786 |

C=Cohesiveness test after one week
$C_1$=Cohesiveness test after three weeks

Based on the standard scores as reported in Table 12, using the .05 level of significance, the experimental null hypothesis relating to the cohesiveness of the two groups could not be rejected for either of the times when the instrument was administered.

In other words there was no significant difference in the cohesiveness of the two groups at either of the two times this factor was tested.

# CHAPTER V

## SUMMARY, CONCLUSIONS AND IMPLICATIONS

This chapter is divided into four sections. The first will be a summary of the study in general. The second part will be a discussion of some of the limitations of the study. Conclusions that can be made from the findings will be the third section; then the final portion will be a discussion of some of the implications of the study.

### Summary

The objectives of this study were:

1. to determine the extent to which the early behavior of a change agent with a group client system affect group members' perceptions of the change agent;

2. to determine the extent to which the early behavior of a change agent with a group client system affects the cohesiveness of a group.

This exploration was carried out by establishing two groups--one for control and another to receive the experimental treatment which constituted the early behavior of the change agent. By having the change agent administer the treatment in the form of an interpersonal

communications exercise to the experimental group, it was hypothesized that there would be some significant differences in the perceptions of the group members about the change agent because of the psychological climate created by that exercise. No treatment was given to the control group.

The control group was made up of 10 newly-recruited participants in the Expanded Food and Nutrition Program in New Orleans. They received three weeks of training from the change agent. Subsequently, a group of 13 participants received the same training with the exception that they were given the exercise in interpersonal communications at the beginning of the training.

A test instrument relating to the perceptions of the group members about the change agent was administered to both groups prior to the beginning of the training; then again after one week; then finally after the third week of training. Data gathered at each of these times were used to determine difference scores since the hypotheses were concerned with the differences in the amount of change for the two groups. This was done by determining the differences in perceptions of the change agent in the time period between the pretest and the first posttest, between the pretest and the second posttest, and then between the first and second posttest. These difference scores were subjected to a non-parametric statistical ranking test to

determine any significant differences for the three time periods.

Based on the results of the statistical tests, it was found that there was a significant difference in the overall perceptions of the participants about the change agent for the time period between the pretest and the first posttest. In other words, the two groups were significantly different in the amount of change in their perceptions of the change agent after one week of training by that agent. There was no statistically significant difference in the two groups for the other two testing periods.

In structuring the instrument to measure the perceptions of the group members about the change agent, two components were used. One component dealt with the willingness of the group members to maintain a relationship with the change agent and the other dealt with the willingness of that participant to be influenced by the change agent. Experimental null hypotheses were developed as subhypotheses to the one dealing with the overall perceptions. They were tested by extracting the scores from the overall scores. In other words, half the questions in the instrument were devoted to each component; therefore scores relating to these components were extracted to determine if there were any significant differences in the two groups

in regard to them.

The result of this latter testing was that in only one time period for one component was there found to be a significant difference in the participants' perceptions of the change agent. This time period was between the pretest and the first posttest where it was determined that the groups differed significantly in the amount of change in their perceptions concerning their willingness to be influenced by the change agent.

Another major hypothesis tested in this study was concerned with group cohesiveness. This was tested as a reflection of the mutual support, understanding and freedom of expression to be found in the group. Using a group cohesiveness scale, the groups were tested after one week and again after the third week of training to determine if there was any significant difference in the two groups in regard to group cohesiveness. After applying a statistical test to the data, it was determined that there was no significant difference in the cohesiveness of the two groups, either after one week or three weeks of training by the change agent.

## Limitations

As in most studies, this one included some limitations that should be taken into consideration when considering any conclusions that may be made from the findings.

In the first place it should be remembered that the findings are not generalizable to a large segment of the population since the participants were not chosen at random. It was for this reason that a non-parametric test was used to analyze the test data.

Another general limitation that should be kept in mind is that, even though the participants in both groups had similar backgrounds and were from similar neighborhoods in metropolitan New Orleans, no controls were used to insure that both groups were the same. Because of this, some bias could have been introduced into the study by the participants chosen. However, this should not be considered a serious limitation because the administrator doing the hiring used the same criteria when hiring for both groups.

Another limitation has to do with the group cohesiveness test administered to the two groups. The researcher had difficulty explaining to members of both groups how they were to fill in the questionnaire. They seemed to be almost completely naive when it come to any critical analysis of group dynamics. This observation is somewhat confirmed by the fact that the mean scores of both tests were extremely high in relation to the maximum possible. These mean scores were 49.2 and 48.6 for the control group and 46.5 and 45.4 for the experimental group. When considering that the maximum possible would have been 54, it would seem the participants were not

responding in a critical manner.

It should also be remembered that no test was made to determine the effect of altering the psychological atmosphere on the content of the teaching situation. In other words, the findings of this study should not be interpreted to mean that the atmosphere created by the interpersonal communications exercise either helped or hindered the assimilation or transmission of the subject matter involved in this situation.

A final limitation of this study has to do with the general situation that involved a change agent and a group client system. Many such situations involve the change agent acting with the client system to determine needs and objectives. The situation involved in this study was only a specific instance of change agentry where the change agent was assuming a teacher role with groups of newly-recruited paraprofessionals. The instructional objectives of the situation as well as the subject matter were prescribed by persons not directly involved in the situation.

In general it should be remembered that other psychological and situational variables were operant during this study. For instance, no attempt was made to select participants or the change agent on the basis of their psychological needs such as affiliation, power

and achievement.

## Conclusions

One finding of this study was that there was a significant difference in the amount of change in the two groups' overall perceptions of the change agent for the first week of training. The data indicate that the perceptions of members of the experimental group about the change agent changed significantly more than those in the control group in regard to the helping relationship.

From this finding it can be concluded that something caused a difference in the way members of the two groups perceived the change agent. Considering that the only essential difference in the two groups was the experimental treatment, it can be concluded that the exercise in interpersonal communications enhanced group members' perceptions of the change agent in regard to the helping relationship for the first week of training.

Another finding in regard to this portion of this study was that, after the first week, there was so significant difference in the overall perceptions of the change agent by group members. When this was found to be true for the amount of change over the entire three-week training session as well as for the last two weeks of training. In fact, the data showed that the experimental group's perceptions of the change agent had declined at the end of

of the training period even though they had been higher than the control group's after one week of training. From this finding it can be concluded that the experimental treatment did not enhance group members' perceptions over the longer, three-week training period. In fact, it also can be concluded that something was operative within the experimental group after the first week of training that led to a deterioration of group members' perceptions of the change agent.

Also found in this study was that the component of the group members' overall perceptions that had to do with their willingness to be influenced by the change agent was different for the two groups. The differences in this influence willingness component were significant for the first week of training, but were not significant for the entire three-weeks of training nor for the last two weeks. From the findings it can be concluded that the experimental treatment enhanced group members' perceptions of the change agent in regard to their willingness to be influenced by the change agent.

A final finding of this study was that there was no significant difference in the group cohesiveness of the two groups after one week of training and after the third week of training. From this it can be concluded that the experimental treatment did not affect group cohesiveness.

## Discussion and Implications

In order to more clearly understand many of the implications of this study, some of the informal observations made during the course of the study are of importance.

One factor which seemed to have been operative during the study was the teaching style of the change agent. It was observed that she was highly structured in her manner of presenting the subject matter to the participants. She seemed to be careful to follow the prescribed course outline and appeared to become disturbed whenever something happened where she or the students deviated from these procedures. It was obvious that her public school teaching experiences before joining the Cooperative Extension Service had accustomed her to assuming a dominant role in any classroom interaction between teacher and student.

On the other hand, persons knowledgeable in the field of nutrition were complimentary of her knowledge of the field. However, her supervisors also observed that she seemed to feel her superior knowledge of nutrition should entitle her to a higher position within the organization.

There was some apprehension about using this change agent in the study because of her strong personality and

domineering attitude. However, the situation is not unlike many encountered in adult education. Also, it was felt that this situation might provide a much stronger test of the effects of the experimental treatment.

In looking at the findings and conclusions of this study it seems appropriate to refer to the conceptual frame of reference and the Kolb and Boyatzis model for analyzing the helping relationship as set forth in Chapter II.

Even though the task involved in this study falls within the framework of what Kolb and Boyatzis call "education," it would se m that this is not adequate for analyzing what goes on in a helping relationship as found in this study. It may well be that the "type" of educational task is just as important as the type of help being offered. For instance, if the educational task involves the helper drawing out information already present in the clients, the educational task of the change agent would be much different than if it is one of transmitting information to be assimilated by them.

An example of this situation might be if the helper has a limited time to transmit a quantity of information. This probably would call for a highly structured situation with little time for question asking. On the other hand, if the educational task was to insure full understanding of some information, it would be structured

so everyone in the client system felt free to ask questions and interact with the helper at any time, no matter how often the presentations were interrupted. In general, it may well be that the type of educational tasks facing the change agents might affect the way they attempt to structure the environment and psychological climate.

The findings of this study indicate that the perceptions of the control group members about the change agent continued to improve from the beginning of the training session until the end. On the other hand, the experimental group members' perceptions improved more than the control group members' perceptions for the first week of training, but declined sharply during the final two weeks of training.

It is possible that the experimental group, because of the experimental condition, believed that the environment was such that free exchanges between them and the teacher were being encouraged. However, when the change agent was unable to maintain this environment, the group members became frustrated and altered their perceptions of the change agent.

Assuming that this is what happened between the change agent and the experimental group, another factor from the Kolb and Boyatzis model probably was operative. This factor was the need for power on the part of the

change agent. Even though she was able to present the exercise in interpersonal communications and establish a relatively open environment, she was unable to continue in this manner. She may have felt that she had given up too much power by conducting the interpersonal communications exercise, then worked harder to reestablish her dominance over the group.

It may well be that, if the change agent had been reinforced in regard to her original behavior, participants may not have become disillusioned with her mode of teaching. Further research into this may be warranted, especially where the teaching style of the change agent is determined to be a problem in establishing a helping relationship.

Another implication of this study concerns the component of the helping relationship that had to do with the willingness of the clients to be influenced by the change agent. It may be that this is the cognitive component of a helping relationship and is related to the needs of the client system. If their motives and self image are such that they can perceive the information being given out by the change agent as being helpful, then it is conceivable that helping relationships could be maintained by this component alone. In other words, a client may not have to like a helper and associate with him in order to take and use his information, especially if it satisfies his needs.

To recapitulate, it would seem that many factors could be operative in the establishment of a helping relationship between a change agent and a group client system other than the early behavior of that agent. Even though what the client brings to the relationship in terms of needs to achieve, needs for affiliation and needs for power could have some effect on how the relationship develops, it would seem that the behaviors and needs of the change agent for particular types of educational tasks may be the area most worthy of further investigation. In other words, a legitimate question to ask would seem to be, "What kind of environment and psychological climate is best for a particular type of educational task to be carried out by a change agent?". A major consideration would be the needs of the change agent because they may be such--as in the case of this study--that one type of environment is established, but the change agent is unable to maintain it, resulting in a deterioration of the relationship with the client system.

It would appear that the use of "warm-up" devices to free communication between change agents and group client systems are valuable, but they probably should be used selectively by persons who have a full understanding of the dynamics of interpersonal communication and group activities. Otherwise, the consequences may be less than desirable.

On the other hand, the findings of this study seem to indicate that the use of the interpersonal communications exercise created a favorable psychological climate until after the first week of training. This would imply that the use of such a device for a short-term workshop of a week or less may be conducive to a favorable helping relationship between a change agent and group client system. Further sutdy in this area seems to be indicated, not only for short time spans but also for longer periods such as those encountered in classroom teaching situations.

Another area of study also might be with the psychological climate found in client systems that help to determine their own learning and/or teaching objectives. This research would be specially pertinent for county agents, home demonstration agents, community developers and other change agents who work for extended periods of time with groups of volunteers.

REFERENCES


Argyris, C. Explorations in interpersonal competence--I. Journal of Applied Behavioral Science, 1965, 1, 58-83.

Back, K. Influence through social communication. Journal of Abnormal and Social Psychology, 1951, 46, 9-23.

Campbell, D. Leadership and its effects upon the group. Columbus, Ohio: The Bureau of Business Research, College of Commerce and Administration, The Ohio State University, 1956.

Cattell, R. New concepts for measuring leadership in terms of group syntality. Human Relations, 1951, 4, 161-184.

Cogan, M. Theory and design in a study of teacher-pupil interaction. In Amidon, E. and Hough, J., (Eds.), Interaction analysis: Theory, research and application. Reading, Massachusetts: Addison-Wesley Publishing Company, 1967.

Ferguson, G. Statistical analysis in psychology and education. (2nd ed.) New York: McGraw-Hill Book Company, 1966.

Festinger, L. Informal communication in small groups. In H. Guetzkow, (ed.), Groups, leadership and men: Research in human relations. Pittsburgh, Pennsylvania: Carnegie Press, 1951.

Flanders, N. Some relationships among teacher influence, pupil attitudes and achievement. In E. Amidon and J. Hough, (eds.), Interaction analysis: Theory, research and application. Reading, Massachusetts: Addison-Wesley Publishing Company, 1967(a).

_____. Teacher influence in the classroom. In E. Amidon and J. Hough, (eds.), Interaction analysis: Theory, research and application. Reading, Massachusetts: Addison-Wesley Publishing Company, 1967(b).

Frank, L. How to be a modern leader. New York: Association Press, 1954.

Gordon, T. Group-centered leadership. New York: Houghton Mifflin Company, 1955.

Hare, A. Small group discussions with participating and supervision leadership. Journal of Abnormal and Social Psychology, 1953, 48, 273-275.

Havelock, R. A guide to innovations in education. Ann Arbor, Michigan: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, 1970.

Haythorn, W. The influence of individual members on the characteristics of small groups. Journal of Abnormal and Social Psychology, 1953, 48, 276-284

_____, Couch, A., Haefner, D., Langham, P., and Carter, L. The behavior of authoritarian and equalitarian personalities in groups. Human Relations, 1956, 9, 57-74.

Homans, G. The human group. New York: Harcourt, Brace and Company, 1950.

Isaac, S. and Michael, W. Handbook in research and evaluation for education and the behavioral sciences. San Diego, California: Robert R. Knapp, Publisher, 1971.

Jones, J. and Verma, S. Evaluation of a nutrition education program in Louisiana for low income clientele, 1970. Baton Rouge, Louisiana: Louisiana Cooperative Extension Service, 1972.

Kirscht, J., Lodahl, T., and Haire, M. Some factors in the selection of leaders by members of small groups. Journal of Abnormal Psychology, 1959, 58, 406-408.

Knowles, M. The modern practice of adult education. New York: Association Press, 1970.

Kolb, D. and Boyatzis, R. On the dynamics of the helping relationship. The Journal of Applied Behavioral Science, 1970, 6, 267-289.

Lambert, W. W. and Lambert, W. E. Social psychology. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1964.

Leavitt, H. Some effects of certain communications patterns on group performance. Journal of Abnormal and Social Psychology, 1951, 46, 38-50.

Lippitt, R., Watson, J., and Westley, B. The dynamics of Planned change. New York: Harcourt, Brace and World, Inc., 1958.

Loomis, C. Social Systems: Essays on their persistence and change. Princeton, New Jersey: D. Van Nostrand Co., Inc., 1960.

NTL Institute for Applied Behavioral Science. Feedback and the helping relationship. In R. Golembiewski and A. Blumberg, (Eds.), Sensitivity training and the laboratory approach. Itasca, Illinois: F. E. Peacock Publishers, Inc., 1970.

Pankowski, Mary L. The relationship between group process training and group problem solving. Unpublished doctoral dissertation, Florida State University, June 1972.

Phillips, G. Communication and the small group. Indianapolis, Indiana: The Bobbs-Merrill Company, Inc.,

Polansky, N. and Kounin, J. Clients' reactions to initial interviews: A field study. Human Relations, 1956, 9, 237-265.

Rogers, Carl R. The characteristics of a helping relationship. In W. G. Bennis, K. D. Benne, and R. Chin, (Eds.), The planning of change. (2nd ed.) New York: Holt, Rinehart and Winston, Inc., 1969.

Schein, E. Management development, human relations training, and the process of incluence. In E. Schein and J. Weschler, (Eds.), Issues in human relations training. Washington, D.C.: National Training Laboratories, National Education Association, 1972.

_____. Process consultation: Its role in organization development. Reading, Massachusetts: Addison-Wesley Publishing Company, 1969.

Schmuck, R. A. and Schmuck, P. A. Group processes in the classroom. Dubuque, Iowa: Wm. C. Brown Company Publishers, 1971.

Shartle, C. Studies in naval leadership, Part I. In H. Guetzkow, (Ed.), Groups, leadership and men. Pittsburgh, Pennsylvania: Carnegie Press, 1951.

Shaw, M. E. Group dynamics. New York: McGraw-Hill Book Company, Inc., 1971.

Stodgill, R. Personal factors associated with leadership. Journal of Psychology, 1948, 25, 35-71.

_____, and Koehler, K. Measures of leadership structure and organization change. Columbus, Ohio: The Ohio State University Research Foundation, 1952.

This, L. and Lippitt, G. Management guidelines to sensitivity training. In Lippitt et al., (Eds.), Optimizing human resources. Reading, Massachusetts: Addison-Wesley Publishing Co., Inc., 1971.

Trecker, H. B. and Trecker, A. P. How to work with groups. New York: Woman's Press, 1952.

# APPENDIX I

# AN EXPERIMENT IN COMMUNICATION

## Purpose

To demonstrate the differences between one-way and two-way communication and to point up the advantages of two-way communication.

## Setting

This exercise is suited for students in the upper-elementary or secondary grades and can be completed within a class period.

## Procedure

1. Discuss communication and how it works. Explain the differences in one-way communication and two-way communication. (In one-way communication the sender tells the receiver something and this message ends the communication. A lecture, written instructions for a test, and memos are examples of one-way communication. In two-way communication the receiver of a message can ask for clarification, elaboration, and both sender and receiver can benefit from the increased mutual understanding that results. Discussions and question-and-answer periods are examples of two-way communication.
2. Allow the class to choose a person who they feel is capable of giving directions clearly. This person will act as the sender. The remainder of the class, the receivers, will be prepared, with pencil and paper, to follow the sender's directions.
3. The sender should be out of sight, but within hearing range of the class. Give him Diagram One (See Sheet A) and instruct him to explain it so well that each student will be able to make a figure exactly like it. Each student is to follow the sender's directions without having any communication with the sender or any other member of the class. Note the time the sender begins.
4. Make this chart on the chalkboard:

One-Way Communication
Time _____

| Estimated Accuracy | Actual Accuracy |
|---|---|
| 5 | |
| 4 | |
| 3 | |
| 2 | |
| 1 | |
| 0 | |

Two-Way Communication
Time _____

| Estimated Accuracy | Actual Accuracy |
|---|---|
| | |

When the sender has finished, record on the Chart how long he took. Ask the students to estimate how many figures they have drawn correctly; four; three; two; one. Record the responses on the chart.

5. Ask the students how they felt during the demonstration and how they think the sender felt. Have the sender do the same.
6. Begin the two-way communication demonstration. Have the sender face the class and describe Diagram Two clearly and completely. This time the receivers may ask questions, and the sender may reply, but he may not use gestures. Again record the time and estimated accuracy.

7. Show the drawings to the class by holding them up or copying them one at a time on the chalkboard.
8. Have each student record his actual accuracy. (To be correct, a figure must be the right shape and in proper relation to other figures.)

## Analysis

Typically, the following results can be observed:

a. Two-way communication takes much longer.
b. Two-way communication results in greater accuracy in the students' drawings.
c. In one-way communication, the sender feels relatively confident; the receiver, uncertain or frustrated.
d. In two-way communication, the sender often feels frustrated or angry; the receiver relatively confident.

Compare these observations with the results your class achieved, and close with a discussion of the relevance of the experiment to oral and written reports and to small-group work.

## Materials

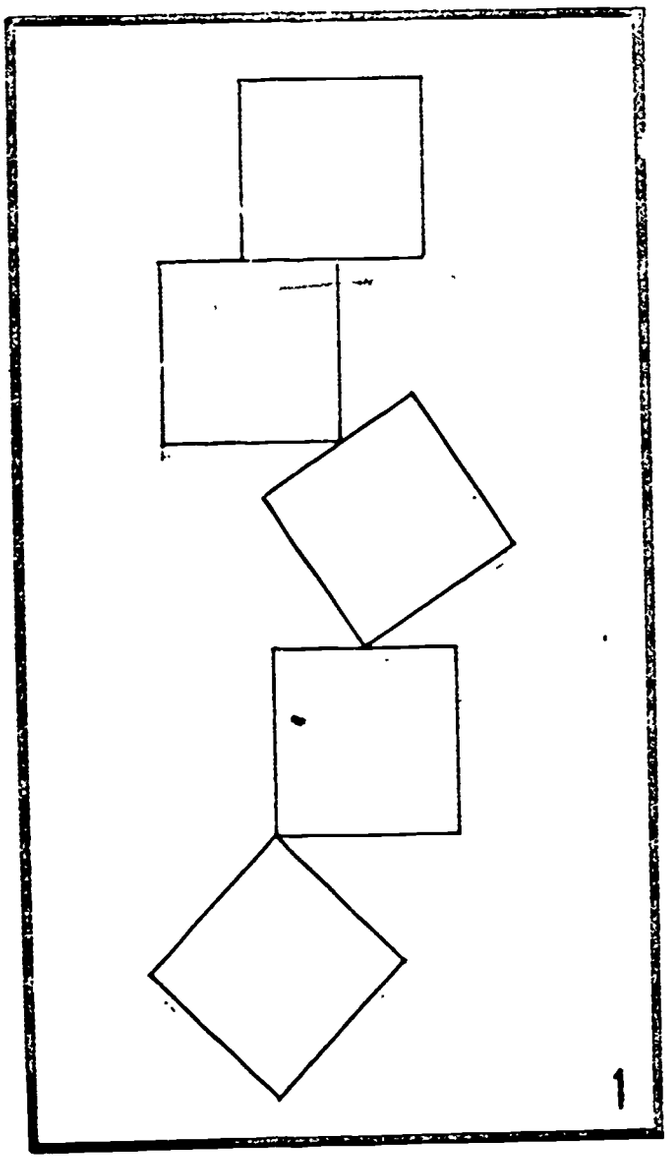
One copy of each diagram on separate sheets of paper

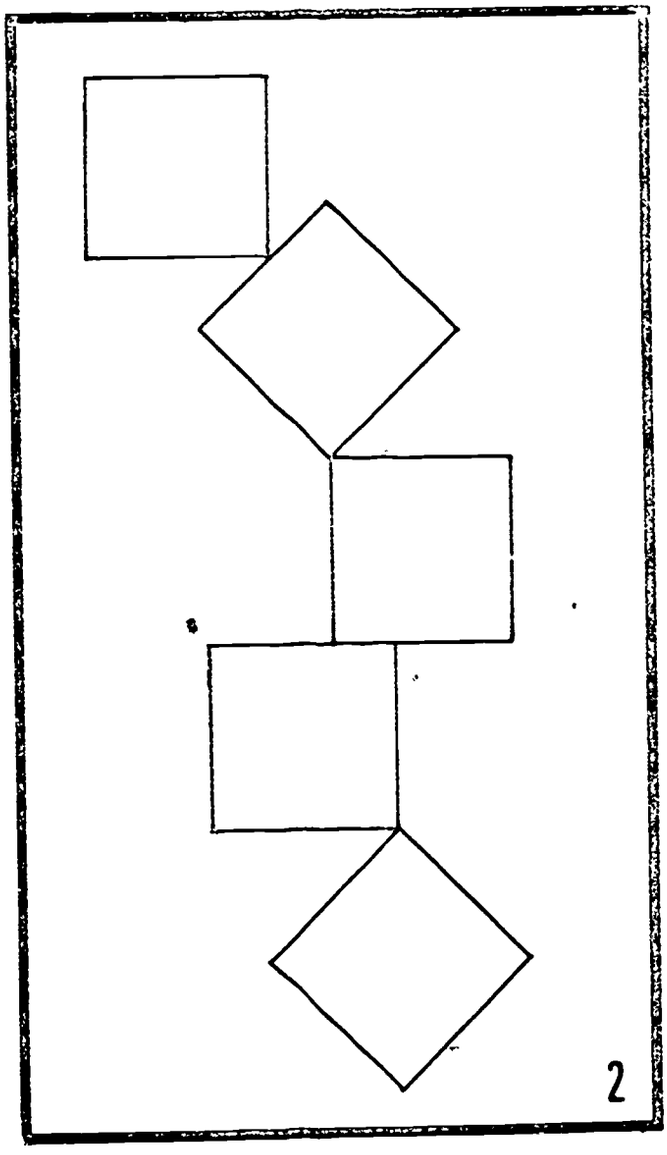
Chalkboard

Paper and pencil for each participant

AN EXPERIMENT IN COMMUNICATION 82

A

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# APPENDIX II

TRAINING STUDY
GROUP NO. _____
PARTICIPANT NO. _____

Please place an "X" in one of the spaces that you feel comes closest to your feelings about each statement. Please consider each statement separately and do not try to mark what you might think anyone would like for you to indicate. Try to be as honest as possible in your response. No one but you will know what you indicated as the scores will be put together for the entire group.

If you have a question about any statement feel free to ask the person in charge.

1. The information the teachers have given me will be helpful when I begin working in the neighborhoods.

   DISAGREE COMPLETELY ' ' ' ' ' ' ' AGREE COMPLETELY

2. The teachers in this project are persons I would like to know better socially.

   DISAGREE COMPLETELY ' ' ' ' ' ' ' AGREE COMPLETELY

3. The teachers in this project have changed my mind about many things relating to foods and nutrition.

   DISAGREE COMPLETELY ' ' ' ' ' ' ' AGREE COMPLETELY

4. The teachers have eliminated doubts I had about participating in this project.

   DISAGREE COMPLETELY ' ' ' ' ' ' ' AGREE COMPLETELY

5. The teachers in this project are capable of helping me learn how to teach people about nutrition.

   DISAGREE COMPLETELY ' ' ' ' ' ' ' AGREE COMPLETELY

6. I would like the teachers to be available to help me whenever I have problems after I begin working in the neighborhoods.

DISAGREE COMPLETELY ' ' ' ' ' ' ' AGREE COMPLETELY

7. When working in the neighborhoods I plan to act the way the teachers tell us to as much as possible.

DISAGREE COMPLETELY ' ' ' ' ' ' ' AGREE COMPLETELY

8. If I quit this project now, I would miss my association with the teachers.

DISAGREE COMPLETELY ' ' ' ' ' ' ' AGREE COMPLETELY

9. I would take the advice of the teachers on matters besides the nutrition project.

DISAGREE COMPLETELY ' ' ' ' ' ' ' AGREE COMPLETELY

10. I feel I might need further training by the teachers after completing this three-week training period.

DISAGREE COMPLETELY ' ' ' ' ' ' ' AGREE COMPLETELY

WHEN YOU HAVE ANSWERED THE QUESTIONS TO YOUR SATISFACTION PLEASE HOLD THIS PAPER UNTIL YOU ARE ASKED TO TURN IT IN.

THANK YOU FOR YOUR COOPERATION.

# APPENDIX III

UNIVERSITY OF OKLAHOMA

GROUP COHESIVENESS SCALE*

Instructions: We are interested in your feelings about the class discussions in which you have participated. Please indicate your private reactions on the following scales by circling the appropriate number.

1. How satisfied were you as a member of this group?

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Completely satisfied | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Completely dissatisfied |

2. How responsible did you feel for class productivity?

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Completely responsible | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Completely irresponsible |

3. How did your own individual performance compare with the other members of the class?

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Completely superior | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Completely inferior |

4. How free did you feel to express your own ideas and opinions?

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Completely free | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Completely unfree |

5. How cooperative or competitive did you feel during these discussions?

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Completely cooperative | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Completely competitive |

6. How would you rate the group you have just worked with in comparison to other groups with which you have worked?

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Completely superior | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Completely inferior |

*Instrument title for this study.

VITA

Douglas W. Darden, the son of Norman N. Darden and Evelyn LeBlanc Darden, was born on May 30, 1935, in Tuscaloosa, Alabama. He attended public schools at Springhill, Louisiana and was graduated from Springhill High School in 1953. He attended Louisiana State University from 1953 until 1955. From 1955 until 1958 he served in the U.S. Army. In 1958 he returned to Louisiana State University where he was graduated in 1960 with a Bachelor of Arts degree in journalism. From 1960 to 1962 he served as a reporter for the Alexandria Daily Town Talk newspaper in Alexandria, Louisiana. In 1962 he joined the Louisiana State University Cooperative Extension Service as an assistant editorial specialist. In 1968 he received a master of arts degree in journalism with a minor in Extension Education from Louisiana State University. That same year he was promoted to associate editorial specialist, the position he now holds. In 1970 he was granted a sabbatic leave to do graduate work at Florida State University. He is married to the former Mary Ann Umphries of Taylor, Arkansas. They have two children--a son, Eric, and a daughter, Alice.