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The relationship between group empowerment and self-directed learning in selected small groups in Michigan

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THE RELATIONSHIP BETWEEN GROUP EMPOWERMENT AND SELF-DIRECTED LEARNING IN SELECTED SMALL GROUPS IN MICHIGAN

By

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ABSTRACT

THE RELATIONSHIP BETWEEN GROUP EMPOWERMENT AND SELF-DIRECTED LEARNING IN SELECTED SMALL GROUPS IN MICHIGAN

By

PADMA B. SINGH

Identification of the relationship between group empowerment and self-directed learning is the central objective of this study. The setting of the research is small groups.

The respondents were members of eight existing community groups. A total of 81 members from the groups participated in the study.

The instrument for data collection was a self-administered mailed questionnaire. The instrument consisted of 20 items to measure group empowerment as perceived by the respondents, 12 items to measure perceived self-directed learning, and seven items related to general characteristics of the respondents.

Findings revealed that group members who perceived their group as being more empowering tended to perceive themselves as being more self-directed. Furthermore, groups

which were rated high in empowerment also had a higher proportion of self-directed members.

The study indicates that group members who perceived themselves as being more self-directed tended to perceive their group as being more empowering. Findings also showed that there is a variation in the perception of group members regarding group empowerment and individual self-directed learning.

Findings revealed that members with longer group membership see their group as empowering and see themselves as self-directed. However, age, gender and level of education were not related to the perceptions of group empowerment or self-directed learning.

This study suggests that the group processes that empower individuals within the group can also facilitate individuals to move from low self-directedness to high self-directedness. The study also implies that the enhancement of competencies to be self-directed learners tends to help the groups become more empowering.

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CHAPTER I

INTRODUCTION

The Problem

The construct of empowerment is emerging as the new force in organizational life (Vogt, Murrell, 1990). Empowerment realizes and reconceptualizes the relationship among tasks, work, achievements, and connectedness. Along with theories of the growth of self and personality, empowerment has helped to clarify how an individual attains a sense of worthiness and well-being. During the 1950's and 1960's, this theme of individual well-being was embodied in the literature on motivation and self-actualization, as well as in a humanistic model of existence. Today this theme of individual well-being is expressed by the term empowerment. Empowerment means different things to different people. Some view empowerment as the redistribution of power from the "haves" to "havenots", and thus regard it as a phenomenon of a zero-sum game. Recent literature on empowerment (Vogt and Murrell, 1990; Chavez, 1990; Schwerin, 1990; Margot, 1989) suggests that: empowerment means growth, not a distribution of power; the growth of power is a dynamic, liberating force that frees energy to use or to generate more power; empowerment is facilitative in its nature and its implementation; and empowerment leads

individuals as well social groups or organizations toward the path of self- efficacy. Murrell (1985) identifies two categories of empowerment: (1) self-empowerment, the ability to empower oneself, and (2) interactive empowerment, the process of creating power with others. The setting of interactive empowerment can be dyad, small group, organization, community, or society. Empowerment through interaction in a small group setting is the focus of this study. Small groups are characterized by the face-to-face interaction among members who may join or leave the group without affecting the overall character of the group.

Various development agencies conceive of groups as vehicles of change. These groups, also referred to as teams or networks, are the institutions of our time. Whatever the stated purpose, the function of most networks is mutual support and enrichment, empowerment of the individual, and cooperation to effect change (Dean, 1984). Naisbitt (1982) contends that some networks have a long life evolving into a stable, ongoing organization. Other networks remain open and fluid, and some may dissolve with members forming or joining new networks.

The attempt to use small groups for community improvement has many starting points. The focal idea is that residents in a community should be helped to act collectively to solve some problem which affects the lives of all of them. In planning and undertaking such a task,

the residents achieve tangible results, and if the process is skillfully handled, they also learn how to attack other problems, being motivated by their feelings of success in their initial efforts. The association or organizational structure which they have developed to cope with the problem continues to remain intact. They also use the knowledge of themselves and of their community, and the method of attack which they have learned in dealing with the first problem again and again. These interventions however, do not lead to the same end results in all situations. This may be partly attributed to the models of helping relationships which influence the process of development. These models are the: moral model, medical model, enrichment model, and empowerment model (Sleeter, 1981). The "moral model" blames the victim by viewing the person as responsible for both their own problems and solutions. The "medical model" and the "enrichment model" are both models of benevolent helping relationships in which experts with power and knowledge help those who presumably lack these resources. The fourth model, the "empowerment model" views the person as a victim of problems created by society, but also as a potentially active solver of his/her own problems. Various scholars (Dunst and Trivette, 1984; Hughes, 1987; Kramer, 1989) advocate empowerment strategies that capitalize on peoples' abilities to understand their own needs and that build on the energy, networks, and strengths people have. The

benevolent helping relationship models, although implemented with good intentions and producing some good positive results, tend to reinforce the status quo and perpetuate dependency. Cummins (1986) has made similar arguments for empowering learners. According to Cummins, empowering education programs work with learners and their home communities to build upon what they have to offer; disabling programs ignore and attempt to eradicate the knowledge and strengths that the learners bring, and replace them with the knowledge and strength of the dominant society. This, in Paulo Freire's view, is indoctrination.

An empowerment approach places emphasis on autonomy in the decision-making process of organized communities, local self-reliance, and experiential learning (Freidman, 1992). If interventions geared toward community education do not facilitate individual growth but instead reinforce the status quo, then educators have to reexamine their intervention strategies so as to facilitate individual as well as community development.

In this light, it is imperative to know if the interaction within a group is facilitating or hindering individual growth. What are the situations in which individual growth is facilitated or restricted? Does learning take place in group interaction? If it does, does it induce self-directedness in learning?

Conceptual Framework

The purpose of this conceptual framework is to establish a conceptual base for understanding the relationship between the two major concepts of the study: empowerment and self-directed learning. These two concepts are central to this study and it is essential to present them clearly.

Empowerment

This study conceives of empowerment as an interactive process based on a synergistic, not a zero-sum, assumption of power. This implies that one individual can influence or affect the behavior of an other individual so that the interaction between them produces more power or influence for both of them. In fact, all individuals engaged in working together have the potential to empower one another, so that the net result is an increase in power for all those involved. Most experts define power as the ability to control or change another's behavior. The reference to power in the context of this study, however, is the ability of an individual to control his/her own life situation. This is well reflected in the concept of empowerment presented by Edgar Boon (1989) stated as "providing adult learners with the knowledge that will give them control of their world."

The process of empowerment encapsules two types of behavior: empowered behavior and empowering behavior. Empowered behavior is the behavior demonstrated by individuals who are empowered. Empowering behavior is the behavior of an institution or persons that is designed to help others grow toward a state of empowerment. In this study, empowering behavior in small groups is referred to as measures of group empowerment. These are:

- Opportunity for group members to make decisions;
- Opportunity for group members to reflect on ideas;
- Atmosphere that promotes willingness to learn;
- Mutual support between group members;
- Involvement of members in group activities;
- Collegiality between group members;
- Valuing of group members' experiences;
- Facilitative leadership;
- Valuing of individualized differences of group members;
- Atmosphere that promotes trust among group members.

Actions of empowering behavior can often determine empowered behavior. These actions can be conceived of on a continuum from highly disabling behaviors to highly empowering behaviors. For example, an opportunity for group members to make decisions can be highly empowering if there is ample opportunity for members to make decisions. Or,

this may be highly disabling if opportunity to make decisions does not exist.

Empowered behavior constitutes personal development involving increasing self-insight and recognition and acceptance of one's complex, ever-changing dynamics; increased understanding of one's world and how it works; and increased capacity for taking responsibility for oneself, coupled with the increased competence in undertaking social obligations.

In this study, the framework for analyzing empowering behavior and empowered behavior has been adapted from a model of force field analysis described by Axinn (1988). The roots of this model are embedded in the field theory of Lewin (1935). Lewin's field theory conceives groups in terms of their orientation toward goals. A group is seen as occupying a position in its subjectively salient environment or "life space". Within these life spaces, a group (or individual) locomotes, or changes its position. The direction of movement during its goal seeking activity reflects the existence of two opposing forces: forces of change and continuity.

Referring to these forces, Axinn (1988) contends,

> "there are various forces pushing in the direction of change, and countervailing forces pushing in the direction of continuity. At any particular point in time, things are as they are because the forces in one direction balance the force in the other. The future situation will be different from the present situation to the extent that there are either increases in the forces of

> change; decreases in the forces of continuity; or some combination of the two which results in a different balance."

From the force field perspective, empowering behaviors correspond to the forces of change and disabling behaviors correspond to the forces of continuity.

If the magnitude of the forces of change is greater than that of the forces of continuity, the direction of movement of the individuals in the group will be toward self-directedness manifested by interdependent relationships rather than dependent relationships.

Self-Directed Learning

There is no unified view of self-directed learning. It is viewed through two perspectives: a process perspective and a personality perspective. Self-directed learning with a process perspective is seen as an instructional process which identifies the skills and abilities needed by an individual to engage in the process. The personality perspective envisions self-directed learning as a unified concept which focuses on an individual's motivation to pursue learning throughout life rather than on the ability of an individual to engage in episodes of self-instruction (Oddi, 1987). The broader perspective that considers skills and abilities as needed for self-directed learning is the view of this study. At the same time, it includes the view that intrinsic motivation is needed for self-directedness in

learning. The direction of movement toward self-directed learning entails a relationship between group empowerment and self-directed learning. The roots of this relationship are embedded in learning theories that have been presented by Knowles (1975), and Kolb, Rubin, and McIntyre (1971). Some of the characteristics of Knowles' theory state that adults:

1. Learn when what they are learning is relevant to them.
2. Learn best when the climate or atmosphere for learning is nonjudgemental and supportive.
3. Learn when they are committed (i.e. to the learning , to their own growth, to the organization, to others).
4. Learn when they understand the personal context of new learning (Where I am now? Where am I going? How will I get there?
5. Learn when all of their senses are stimulated.
6. Learn best when they are active (i.e. when they discuss, influence, or participate).
7. Learn when they receive constructive feedback, be that feedback reflective or evaluative in nature.
8. Learn at their own pace. Again, the principle of individual difference is reinforced.

The tenets of learning forwarded by Malcolm Knowles correspond to the group interaction processes that empower individuals and groups (Margot, 1989; Levingston, 1991, Vogt and Murrell, 1990; Catalano and Della, 1991). In

characterizing the theory of andragogy, Knowles (1975) assumes that with the development of self- concept, learners move from dependence in childhood to self-directedness in adulthood.

Another learning theory that relates the empowerment process to self-directed learning is the theory of experiential learning (Kolb, Rubin, and McIntyre, 1971).

Experiential learning theory provides a model of learning and adaptation processes consistent with the structure of human cognition and the stages of human growth and development. A particularly useful perspective on experiential learning is that of Kolb, Rubin, and McIntyre (1971), who conceptualize learning as a cyclical process of concrete experience, reflective observation, abstract conceptualization, and active experimentation (Figure 1). However, they note that different people learn differently. When people who have different learning strengths come together, they not only learn more, but they gain an appreciation of the experience of others and of the benefits of reciprocity. More specifically, there are two dimensions to the learning process. The first dimension represents the concrete experiencing of events at one end and abstract conceptualization at the other. The other dimension has active experimentation at one extreme and reflective observation at the other. Thus, in the process of learning, one moves in varying degrees from actor to observer, from

specific involvement to general analytic detachment. As cited by Kolb, Rubin, and Osland, (1991), many cognitive psychologists (Bruner, 1960, 1966; Harvey, Hunt, and Shroeder, 1961) have identified the concrete/ abstract dimension as a primary dimension on which cognitive growth and learning occurs.

The active/reflective dimension is the other dimension of cognitive growth and learning. As growth occurs, thought becomes more reflective and internalized (Kolb, Rubin, and Osland, 1991) and there is intrinsic motivation toward self-directedness in learning (Oddi, 1987). Levine (1991), in describing the characteristics of adult learners, states that the adult learner is motivated from within himself/herself.

This framework of experiential learning allows for individual differences in styles of adaptation to the world. It encompasses the adaptive concepts such as creativity, decision-making, problem-solving, and attitude change (Kolb, Rubin, and Osland, 1991). The relevance of the theory of experiential learning to empowerment is evident. This theory suggests that individuals respond differently to the learning situation because of different learning styles. It implies that there can be differential impact on individual growth even when individuals are exposed to the same learning situation.

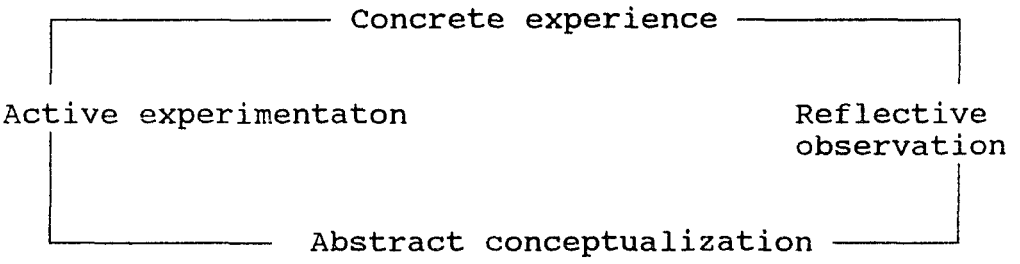

Figure 1. The Experiential Learning Model

Learning theories suggest that empowering forces within the group enhance education and development of self. Vogt and Murrell (1990) assert that with the development of self there is higher commitment (to people, institutions, projects, experiences) and commitment, in turn, connects the individuals with others that bring a sense of self-fulfillment. Thus, intrinsic motivation toward learning moves individuals toward self-directedness. Furthermore, in an empowered group, members contribute their experiences and expertise while working together as a team to produce their best work. This has a synergistic effect on individual and group growth. And, when there is maturity in the individuals, they tend to be self-directed.

Overview. The foregoing discussion has attempted to estabilsh the conceptual base for understanding the relationship between empowerment and self-directed learning. The process of empowerment is viewed as empowering behavior and empowered behavior. Actions of empowering behavior can

often determine empowered behavior. Force-field analysis is used as a model to analyze empowering behavior and empowered behavior. Empowering behavior is the force of change while disabling (disempowering) behavior is the force of continuity. If the magnitude of empowering behavior is greater than the disabling behavior, then the direction of movement of the individuals in a group will be toward self-directedness. As suggested by the learning theories, empowering behavior induces individual growth, which in turn, develops intrinsic motivation within individuals to be self-directed in learning.

Key Concepts

Definitions of Terms

Empowerment. It is an interactive process of providing knowledge to individuals so that they can have control over their world with increased individual and collective efficacy. Implicit in this definition is the notion that knowledge is power. In this study empowerment is conceived of as a group phenomenon. The respondents were asked to express their perception about the group empowerment process.

Group. A group is defined as the collection of individuals with the following attributes:

- face to face interaction;

- interactions are repetitive/frequent;
- some form of structure;
- set of goals toward which actions are directed;
- set of functions;
- roles and norms;

Interaction. It is a process by which human beings confront common areas of concern, engage in meaningfully related dialogue, actively search for solutions to mutual problems, and cope with these solutions purposefully (Lippitt, 1982).

Individual Growth. The ways by which a person learns, and grows as a consequence of analyzed life experiences; with positive interaction in internal and external environments, and of participation in planned educational, training, and developmental activities of either a formal or informal nature (Lippitt, 1982).

Group Growth. The increasing capacity of the group to act as a functional whole, including integration of emotion, rational thought, and action. It includes increasing shares of responsibility and leadership (Hay and Apps, 1981)

Community Problem. A social or economic concern that exists in the community. Initially, the concern may or may not be recognized as a problem by all citizens of the community. The criteria for including or excluding a community problem is, in general, whether or not the solution will benefit the whole community (Hay and Apps, 1981).

Participation. It is the involvement of the learners in group discussion, reflection, decision-making, and task functions.

Self-Directed Learning. Self-directed learning is defined as a process in which individuals take the initiative in designing learning experiences, diagnosing needs, locating resources, and evaluating learning (Knowles, 1975). In this study, self-directed learning is a personal phenomenon. Respondents were asked to express their feelings about their own self-directedness as members of the group.

Goals and Research Questions

Three goals were defined in this study. First, it sought to know to what extent participation of individuals in group interaction can enhance individual growth. The following research questions emanated from this goal:

1. Does individual perception vary with rerspect to the levels of group empowerment?
2. Is there any variation in perceived self-directed learning among individuals in the group.

Secondly, this study sought to identify the demographic variables related to group empowerment and self-directed learning. The following research questions were formulated to address this goal:

3. What is the relationship between group empowerment and demographic characteristics of group members?
4. Does self-directed learning relate to the demographic characteristic of group members?

Thirdly, it attempted to find out if learning takes place in small group interaction. The following research question emanated from this goal:

5. Is there any relationship between group empowerment and self-directed learning?

Importance of Study

Group action has been considered one of the accelerators of extension education. How the dynamics within the group affects development of individuals is a matter of growing concern. The inquiry into this phenomenon is yet in rudimentary stages. This study attempts to advance knowledge in this direction.

The information generated through this study could provide guidelines for development practitioners/extension educators in designing community development programs. In making the programs self-sustaining, development practioners/extension educators need to be aware of the forces that facilitate individual development and those that hinder it. This study could provide this insight.

This study could also define guidelines for facilitating group interaction that could lead to the development of individuals. Development practioners/extension educators can adopt instructional strategies that would facilitate learning from high dependency to low dependency.

This study can be instrumental in program evaluation. Instruments developed by this study can be adopted for evaluating development programs.

There is no coherent instrument that measures individual empowerment within small groups. Previous studies are based on limited indicators of empowerment. This study has explored previous studies and has come up with a valid instrument which can be used in future research to measure individual empowerment in small groups.

This study has interwoven fragmented concepts that relate to empowerment and self-directedness in learning in a more coherent way. It has thus added a new theoretical dimension in the field of andragogy.

Assumptions

1. It was assumed that individuals react differently even when they are exposed to the same learning situation.
2. It was assumed that the respondents could read and write, so the opinions expressed represent their own.
3. Characteristics of late respondents and non-respondents do not differ significantly.

CHAPTER II

LITERATURE REVIEW

This chapter explores the literature pertaining to the concept of empowerment vis a vis small groups. The primary objective for reviewing literature was to be current with the research in the field of empowerment through group interaction. Another objective of the review was to identify different indicators that measure the concepts under study, thus, the development of an instrument was based on the review of literature. The review is centered around empowerment and its measures, group development stages, individual growth, and self-directed learning.

Empowerment

Empowerment Defined

By simple definition to empower means to enable, to allow or to permit. Webster's New Collegiate Dictionary treats "empower" and "enable" as synonyms (Webster, 1977) which mean "to provide with the means or opportunity."

Empowerment has been defined in different ways. Ashcroft (1987) defines it as "bringing into a state of belief in one's ability/ capability to act with effect." Her definition stresses the individual's power to achieve his or her own goals. Chavez (1990) defines empowerment as a process of recognizing one's own strength, using their

inherent strength to set one's own agenda and subsequently make constructive changes to improve one's life. In the same vein, Schwerin (1990) defines empowerment as the process of gaining mastery over one's self and one's environment in order to fulfill human needs. He conceives of self-esteem, political efficacy, perceived competence, and locus of control as the measures of empowerment. Others (Lazarie, 1990; Putman, 1991 and Schatz, 1990) also relegate development of self as the core of empowerment.

Margot (1989) contends that empowerment is dependent on three psychological processes: the development of group identification, stratum consciousness, and self and collective efficacy. Together these changes have been described as developing a sense of critical consciousness. Referring to teacher empowerment, Margot suggests that changes in a teacher's attitudes, beliefs, self esteem, perceptions, and work environment are crucial ingredients of successful teacher empowerment.

Bhasin, in her report on a training program for women development workers about empowerment, stressed the importance of group reflection to increase the understanding of observations and experiences (Kroenenburg, 1986). One research project focusing on the empowerment of teachers explored the complexity of the relationship in a group supervision model and confirmed involvement, collegiality,

and reflection as the measures of empowerment (Catalano, Della, 1991).

Empowerment: the Process

Although empowerment has been defined as "giving power to", "creating power within", and "enabling", there is no definitive meaning. However, there seems to be unanimity among scholars that empowerment is a process rather than an end. In this light, the empowerment process model developed by Vogt and Murrell (1990) seems to be appealing. Their model suggests that the heart of enacting empowerment is a trilogy of education and development, enhanced relationships, and transformation (Vogt, Murrell, 1990). This is depicted in figure 2.

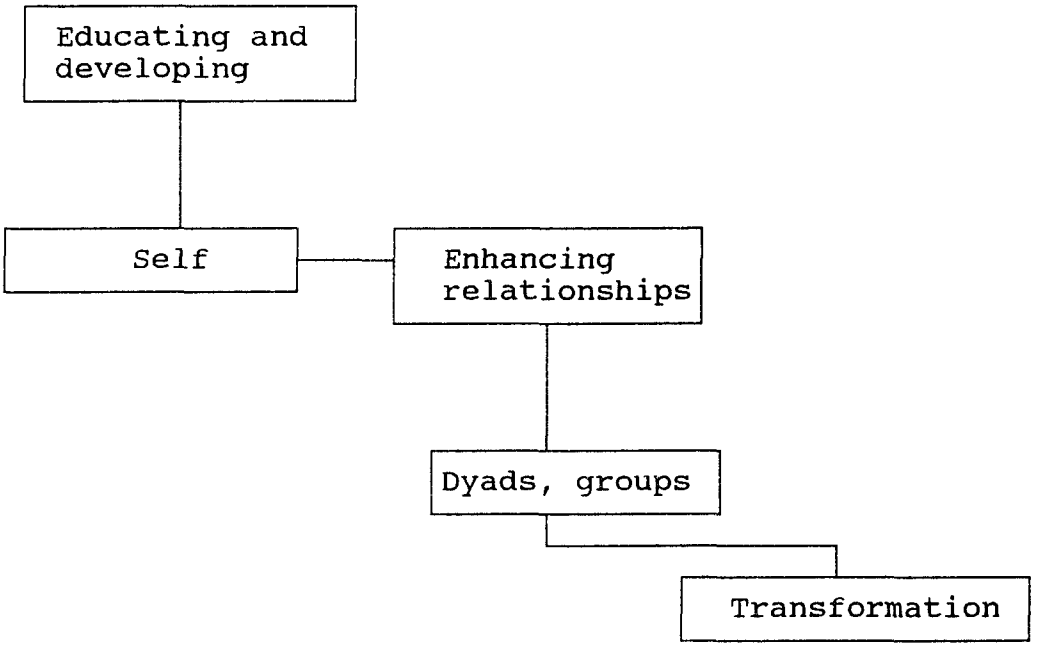

Figure 2. Process of Enacting Empowerment

Educating and developing self involves exposing the individual to the learning conditions. These conditions are characterized by open communication, mutual trust, and enhanced participation. This renders an empowered self which in turn brings about commitment (to people, institutions, projects, experiences). And, commitment in turn connects the individual with others and with a sense of personal worth that brings a sense of self-fulfillment.

In an empowered group, committed individuals contribute their experiences and expertise by working together as teams to produce their best work. This has a synergistic effect on individual and group growth. And when there is maturity

in the individuals, they tend to move toward self-directedness in learning.

The communication process (face-to-face) is open to asking and listening, and encourages everyone's input. Such a communication system creates opportunities for each person to reflect and to receive feedback that fosters growth.

The National Commission on Resources for Youth (1982) outlined the "hows" of empowerment as being:

- individualized, experiential learning
- developmental sequencing of youth participation activities
- opportunities for decision-making and power-sharing
- adult-youth partnerships (willingness to learn from each other)
- opportunities for reflection and evaluation
- involvement of youth as change agents in their communities.

A National collegium of practioners engaged in school reform activities examined reflection and notation in communications in the school renewal network and found that the use of reflective, deliberative dialogue enhanced participant empowerment. Analysis of participant exchanges further suggested that the network stimulated reflection and deliberative thought (Levingston, 1991).

Davis (1990), however, through observing the empowerment process voices a caution: it necessitates self-

discipline. He contends that empowerment methodology can encourage increased individual self-assertion and provide the opportunity for fuller development of humanity with reduced use of violence. The power to be is the basic level of power and is succeeded by the phase of self-affirmation, with its call for survival with esteem. When self-affirmation is confronted by opposition, it becomes self-assertion. Self-assertion, when blocked over time, is replaced by aggression, which can occur in varying situations."

Vogt and Murrell (1990) suggest interventions for empowering individuals as follows:

- extending decision making to the wider group
- openness and willingness to connect
- willingness to give, receive, and request feedback
- enabling to be active participants
- delegation of responsibility, power, work
- recognizing and valuing individual differences
- listening actively to others
- ensuring individuals' right to disagree and be different
- establishing information sharing as a norm
- cultivating a trustful and trustworthy atmosphere
- recognition of and respect for people's needs and feelings
- willingness to share self with others

The empowering interventions put forward by Vogt and Murrell correspond to the facilitative relationships

envisioned by Carl Rogers (1969). Some of these characteristics are:

1. recognition of the need to establish a facilitative environment
2. acceptance of the system in terms of its current status
3. acceptance of each individual and the degree of self-knowledge he or she presently possesses
4. empathetic understanding, taking the time to concentrate on each person's unique circumstances
5. willingness to operate in terms of one's feelings
6. readiness to give and receive feedback, thus conveying the relevance of each person's input and the importance of open communication for growth
7. recognition of the growth potential of these behaviors within a group setting

Although Rogers defined these behavioral characteristics for counselors and leaders of growth groups, it is apparent that they would be useful in creating environments conducive to empowering others in whatever setting they are adopted.

Roger's classic Freedom to Learn (1969) was among the earlier applications of empowerment to education. Roger's method was applied to a wide variety of groups, cconsisting of deffering ages and different purposes. Some of his guidelines for the facilitation of learning (p. 164- 166) were that: the facilitator, through trust, helped to create

the learning experience; the facilitator relied on the desire of the learners to implement projects which had meaning to them; the facilitator accepted the intellectual content and emotional attitudes of the participants; the facilitator became a participant learner, sharing without imposing, and alert to the expressions of deep or strong feelings toward others.

Overview

In light of the preceding literature, it is apparent that empowerment leads individuals toward fuller development of self. This can be referred to as the psychological growth of the individuals. In a group situation, through interaction, there are enhanced relationships which stimulate group growth. The roots of empowerment are embedded in learning theories. Conditions of learning also induce empowerment, but due to individual differences in learning styles, individuals respond differently to learning situations and empowering processes, for that matter. The literature suggests the following as some of the measures that empower individuals:

- Opportunities for group members to make decisions;
- Opportunities for group members to reflect on ideas;
- Atmosphere that promotes willingness to learn;
- Mutual support between group members;
- Involvement of members in group activities;

- Collegiality between group members;
- Valuing of group members' experiences;
- Facilitative leadership;
- Valuing the individualized differences of group members;
- Atmosphere that promotes trust among group members.

In a learning situation, an educator, by assuming the role of a mere facilitator, can stimulate the process of empowerment.

Small Groups

When a set of regularly interacting people possess a common identity or purpose and shared behavioral expectations or norms, it tends to engage in a relatively stable pattern of interaction that sociologists call structure. Thus, small groups are not simply small collections of individuals. They must possess distinctive qualities in order to be called groups. Crosbie (1975) seems to have captured the essence of sociological conceptions by defining small groups as "a collection of people who meet more or less regularly in face-to-face interaction, who possess a common identity or exclusiveness of purpose, and who share a set of standards governing their activities." It is not clear at what point a collection of people becomes too large to merit being called a small group. Nixon (1979) suggests that social units possessing

the qualities proposed by Crosbie which designate small groups tend to range from two to twenty members. Increased size tends to limit the possibility that a given set of people will be able to interact regularly in a direct and meaningful face-to-face manner. In most relationships which are sustained in groups with more than twelve to fifteen members, the group becomes so complex that it tends to split into subgroups (Rice, 1976).

Theodore Mills has identified six models that are useful in studying and analyzing small groups, each offering a different perspective of small group processes (Lippit, 1982:203). These models are:

The quasi-mechanical model which assumes that a group is like a machine; all behavioral acts in a group are seen as functions that can be categorized.

The organic model assumes that groups are like biological organisms; that is, they have a period of formation (birth), a life cycle, and eventually a death.

The conflict model assumes that a small group is a context of endless aggression and discord. All members of the group have to face the conflict of being truly independent versus conforming to some extent, to the group's norms and expectations.

The equilibrium model assumes that a small group, as well as its members have a need to maintain some sort of balance. Conflicts between group members, for example, tend

to be followed by attempts to smooth over hard feelings and to return to a state of interpersonal harmony.

The structural/functional model shifts the emphasis from group survival to group growth. This model assumes that the existence of group agents help the group adapt to new information. Thus, growth and development are attained by the group's responding to feedback from earlier performances.

Referring to Stewart L. Tubbs, Lippitt (1982:204) presents a model based on general systems thinking. The model referred to as Tubbs model (Figure 3), identifies three variables such as relevant background factors, internal influences, and consequences.

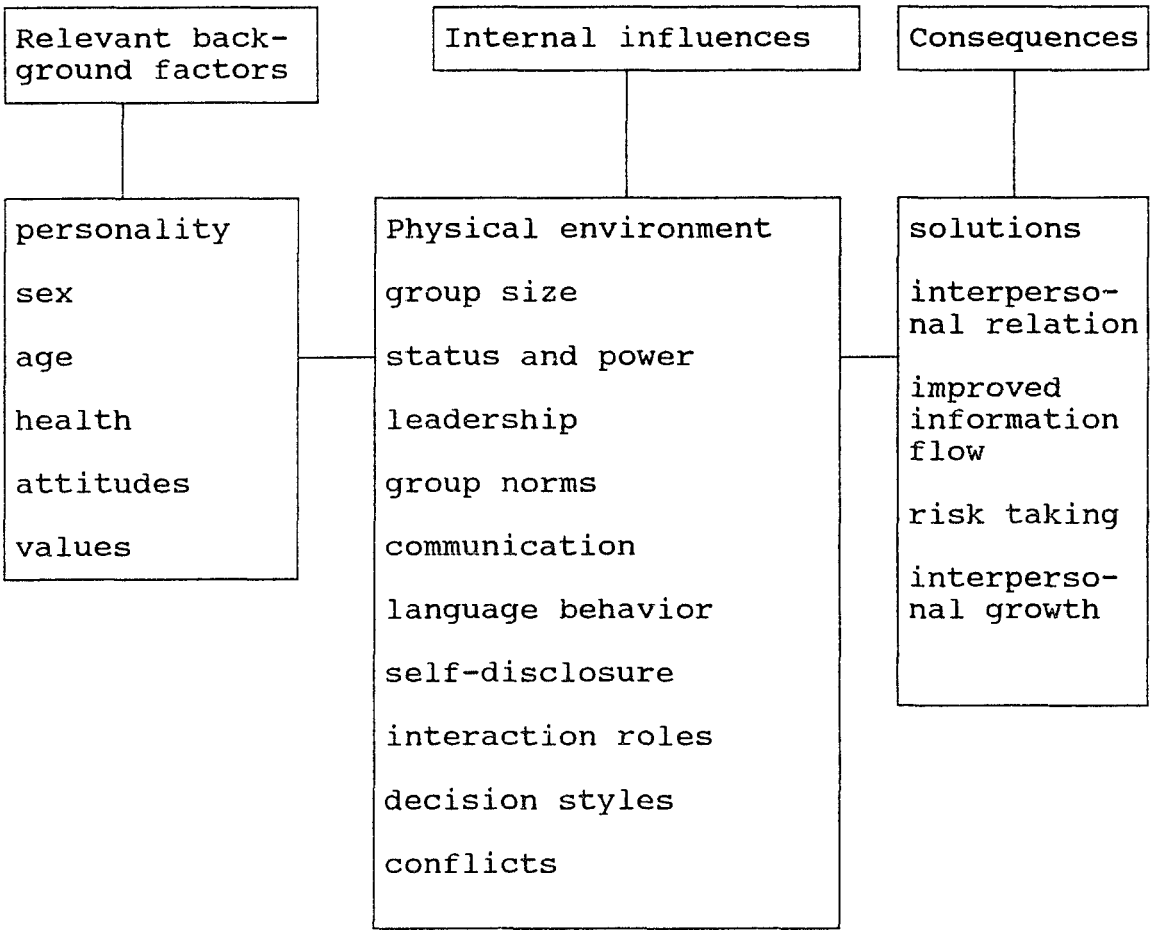

Figure 3. The Tubbs Model of Small Group Interaction

Relevant background factors refer to attributes within the individual participants which exist prior to the group's formation and which will endure in some modified form after the group no longer exists. These background factors, such as personality, attitudes,and values, influence the group's functioning, and vice versa. Internal influences include the type of group, the style of leadership used, the language behavior, interaction role, and decision style employed by the group. Consequences of small group

interaction will obviously vary with the background of the participants as well as with the nature of internal influences. Consequences may include solutions to problems, interpersonal relationships among group members, the amount and quality of information sharing, and the amount of the interpersonal growth of the participants.

Group Development

Most group theorists agree that groups develop through various stages although they differ on the number, length, and sequence of development stages. Group developmental stages have been identified even in extremely short-lived (45- minute) groups (Bales and Strodbeck, 1951). Likewise, developmental stages are found in longer-term groups in more natural settings according to the reviews by Tuckman (1965) and Lacoursiere (1980). Lundgren and Knight (1978) hypothesized a five-stage development sequence, but settled for a three stage model based on the frequent occurrence of significant variations in group development indices over time, but not on the comparison of expected and observed trends. Tuckman (1965) presented a model of group development in which four development phases are proposed " as a conceptualization of changes in group behavior in both social and task realms, across all group setting over time."

Phase one (forming) is characterized by testing, dependency,and orientation. Group leaders are sought for

guidance and approval. The group members begin to become task oriented; to identify the task, its boundaries, and ramifications. The second phase in this development is referred to as "storming." Here group members are polarized over various issues. Intragroup conflicts provoke members' hostilities, thus showing their individuality and resistance toward group conformity.

"Norming" is the third stage in this sequence, and is characterized by development of the group's cohesiveness. Once members begin to accept the group and its individuals, new group norms are established. The group approaches its task in an open and accepting manner.

In the final phase, "performing", group members are able to carry out the task at hand. Since subjective relationships between members have been worked through and established, role structure is no longer an issue. Group members can freely explore and adopt new roles and behaviors which will enhance the group, the task, and themselves.

Bennis and Shepard (1956) see small groups as dealing with the fundamental problems of authority, power, intimacy and love, and theorize that progressing groups move from stages of dependence thrcugh stages of interdependence. The initial stage of group's development is marked by dependence on strong group members and leaders. The second major stage in a group's development, interdependence, is characterized by "personal relations". Each phase has three subphases.

Within the first phase of dependence, Bennis and Shepard distinguish three subphases; namely, "Dependency-flight", "Counterdependency-flight", and "Resolution-catharsis". The first two subphases are the longest lasting of the three. The first subphase "Dependency-flight" is characterized by self- oriented behavior, anxiety, and superficiality, with member leaders being assertive or aggressive.

In the second subphase, "Counterdependency-flight," distrust and ambivalence are emotional themes, and attacking and complaining are behavior modes. Feedback should intensify in emotionality, be even more negative, and agreement with both positive and negative feedback should decrease as more data become available from group interactions. Tuckman's first two stages, "Forming" and "Storming", particularly the latter, characterized by infighting, hostility, as well as emotionality as well as derogation and negativity lead to the same expectations about feedback described above.

The third subphase, "Resolution/catharsis," marks the end of the stormy period. The group emerges from this phase with each member accepting his/her full share of responsibilities for what happens in the group.

The next major phase in Bennis and Shepard's theory, "Interdependence," has as its first subphase "Enchantment-flight," which is characterized by pairing, attended humor

and laughter, and a high level of interaction. In Tuckman's model, this is a time of harmony, and of mutual acceptance. With high interaction, members will say more to and about one another. Thus, feedback should be more frequent.

With the next subphase of "Disenchantment-flight," distrust and suspicion prevail, while disparagement and criticism of the group are voiced.

With this phase, the theories of Tuckman and Lacousierie differ sharply from those of Bennis and Shepard. Neither Tuckman nor Lacoursiere recognize a negative phase at this point in group development. In all formulations, groups progress from the stage of intragroup conflict or dissatisfaction, through a period of norming (harmony) or resolution into a phase of performing or production.

There is, however, a consensus among these three authors about the last phase of group development. For all three authors, this is the time for performing, production, or work. Tuckman speaks of the "emergence of solutions" and of insight, sharing, and disclosing; Lacoursiere speaks of task orientation and accomplishment accompanied by positive feelings; Bennis and Shepard speak of consensual validation, characterized by acceptance and understanding, where group members are open, disclosing, and reality oriented.

Boyd (1983), conceiving of a group as a social system confirms the notion of group development. He projects a group as moving from the identity phase of the social

system to one characterized by the manifestation of intimacy. Boyd corroborates with Davie's (1971) thesis, that groups go through phases analogous to the Ego State Developmental Paradigm presented by Erickson. Individuals (personality system) bring into the group not only the resolution of ego stages through which they have passed, but also the phase-specific crisis that they are now -- at the time of group's existence-- concerned with.

George Charrier (Lippitt, 1982:203) has suggested that a group goes through a process of growth similar to the maturation process of individuals.

The first step is called the polite stage: the members of the group are getting acquainted, sharing values, and establishing the basis for a group structure. The group members need to be liked.

The second step is characterized by the question "why are we here?" During this phase, the members define the objectives and goals of the group.

The third step consists of a bid for power: individuals attempt to influence other group members by attempting to change each other's ideas, values, or opinions. This phase is characterized by competition for attention, recognition, and influence.

The fourth step is cooperative: the group members are constructive, open-minded, actively listening, and cognizant

that others have a right to different value systems. It is the beginning of team action.

The fifth and final step is one of unity, high spirits, mutual acceptance, and maximum cohesiveness.

Group Growth

Group growth can be defined and examined in a number of different ways. Thelen (1954), for example, suggests that three types of changes can be used to assess the productivity of group activity: (1) the amount of change in the group itself, (2) the amount of influence the group has on other groups, (3) the affect members have on other groups because of their involvement in the particular group under study. This study focusses only on aspects of change within the group itself. Schien (1969) and Bennett (1973) mention the following considerations in evaluating change or growth within a group: (1) clarity of group goals, (2) participation by all members, (3) the ways the group deals with feelings, (4) the ways problems are diagnosed, (5) the extent to which leadership is shared, (6) how decisions are made, (7) the extent of trust among group members, (8) creativity and growth in the group, (9) communication among group members, and (10) the balance of emotion and rationality. Pfeiffer and Jones (1971) measure group growth in terms of group climate, data flow, goal formation, and control.

Krayer (1988) refers to group development as group maturity and conceives of it as a continuous variable that can be used to describe the state of the group as it progresses from immaturity to maturity. According to Hersey and Blanchard (1982), maturity has two components: ability and willingness. Ability refers to knowledge, skill, and experience. Compared with immature groups, groups at a high maturity level can perform their tasks without much direction from others. Willingness refers to motivation, confidence, and commitment. Unlike immature groups, groups at a high maturity have self-confidence and a healthy self-concept, and do not need extensive encouragement in order to work on a task.

Hersey and Blanchard's theory posits that an immature, zero-history group is highly dependent upon its leader, who must emphasize the task and deemphasize the development of socio-emotional relationships. Members of such groups are generally unable and unwilling to take responsibility for a task. Leaders of established groups that have moved to a highly mature state need not emphasize either the task or the socio-emotional relationships. Members of this type of group are both able and willing to take responsibility for a task. Krayer found the following hypotheses tenable in a class room situation. The hypotheses were:

1. Mature groups voluntarily meet significantly more often than immature groups.

2. Members of mature groups are significantly more satisfied with their groups than members of immature groups.
3. Members of mature groups are significantly more disposed to work with their groups again in the future than members of immature groups.
4. Members of mature groups are significantly more disposed to engage in non-task related activities with their groups than members of immature groups.
5. Mature groups score significantly higher on project performance evaluations than immature groups.

Individual Growth

The terms growth and maturity are used interchangeably throughout this section for the sake of the ease of reviewing the literature. There is an intricate balance between individual maturity and group maturity. Individual maturity is referred to as Psychological maturity (Blank *et al.*, 1988; Hersey and Blanchard, 1969). Group maturity is the manifestation of psychological maturity.

Psychological maturity has been defined in terms of three dimensions: relative independence, ability to take responsibility, and achievement motivation (Hersey and Blanchard, 1969). Relative independence follows from Argyris's (1962, 1964) notion that as individuals mature over time they move from passive to increasingly active

states. Thus, they become less dependent on others and become relatively more independent. The extent to which a person acts independently, is able and willing to take responsibility, and desires to achieve has obvious implications for managers and organizations (Blank, Weitzel, Blau, and Green, 1988).

Blank *et al.* (1988) report that there are three sources of maturity rating are self-raring, a manager, and a peer rating. Despite arguments for and against each of these rating, they maintain a self-rating provides the most intimate perception of a person's psychological maturity.

Overview of Small groups

Small group is meant by primary or face-to-face group. It must consist of more than one individual, and it must not contain more members than can sustain continuous and close personal relationships. Groups are dynamic in nature. They pass through successive stages. The stage of development, however depends on the nature of group interaction. As a result of group interaction, individual as well as group growth is influenced. Measures of individual growth as suggested by review of literature are: self-awareness, sense of personal worth, concern for self-development, interdependence, depth of involvement, future involvement, self-direction, appreciation of others, ability to take responsibility, achievement motivation, and willingness

to socialize. Likewise, group growth is a measure of group climate, information sharing, and goal formation so as to perform more effectively in terms of team work and problem solving.

Self-Directed Learning

Since the early 1970s, an emerging focus of adult education research has been the area of self-directed learning. Studies growing out of Tough's (1979) work on learning projects have provided extensive descriptive evidence that the vast majority of adults engage in deliberate learning activities over the course of a given year and that an extremely high percentage of these are planned by the individual learners themselves. However, there is conceptual ambiguity surrounding self-directed learning. As cited by Oddi (1987), various terms are used for to address the concepts: self education (Dickinson and Clark, 1975; Smith, 1976; Snedden, 1930); independent study or independent learning (Jourard, 1967; Moore, 1972); self-teaching (Tough, 1966); self-instruction (Johnstone and Rivera, 1965); autonomous learning (Houle, 1962,; Miller, 1964; Moore, 1976; Smith, 1976); self-initiated learning (Penland, 1979); and andragogical learning (Knowles, 1975). Long and Ashford (1976) further imply that self-directed learning and self-actualization are synonymous terms.

Kasworm (1983), perhaps, most clearly articulates the ambiguity surrounding self-directed learning, when she notes that self-directed learning is conceived as a belief system reflecting and evolving from a process of self-initiated learning activity; or as an ideal state of the mature self-actualized learner. The literature reveals that there are two perspectives in self-directed learning: process perspective and personality perspective.

Process Perspective

Process perspective is the dominant perspective which views self-directed learning as a process. Griffin (1978) describes five streams of self-directed learning, four of which view self-directed learning as process: the group learning stream espoused by Knowles; the learning project stream described by Tough; the individualized instruction stream as exemplified by programmed instruction and similar independent study techniques; and non- traditional institutional arrangement stream which include approaches to learning such as correspondence study (Oddi, 1987).

Grounding on process perspective, Knowles (1975) defines self-directed learning as a process wherein learners assume responsibility for planning, conducting, and evaluating their own learning. As cited by Oodi, numerous writers (Brockett, 1983; Cheren, 1983; Guglielmino, 1978; Haverkamp, 1983; Long and Ashford, 1976; Moeker and Spear,

1982; Skager, 1978) adopt definitions similar to that of Knowles.

A conception of self-directed learning as a process had led to efforts to identify skills and abilities needed by the individuals to engage in the process. There is considerable variation among writers as to which skills are most important. Knowles (1975) and Guglielmino (1978) cite setting personal goals for learning, identifying learning resources, and evaluating the success of learning as important skills. Smith (1982) includes the ability to chart one's own learning style, use intuition, and lead discussion groups as the needed skills for self-directed learning. Furthermore, Knowles (1975) and Tough (1979) have outlined the following competencies needed by adults to carry out self-directed learning:

1. The ability to relate to peer collaboratively, to diagnose their own learning needs, to translate needs to objective, to identify resources,and to evaluate (Knowles, 1975).
2. The adults need competence in diagnosing needed help, selecting resources, gaining the desired help, analyzing and planning the entire project, and evaluating the project (Tough, 1979)

Caffarella and O 'Donnell (1987) consider there are still numerous questions that need to be explored relating to the issue of competencies in self-directed learning.

These are: how do adults acquire these competencies? Do they become proficient in them as a result of such factors as family influence, formal schooling, work experience and trial and error?

Personalty Perspective

Oddi has made a significant contribution in viewing self-directedness in learning as personality construct (Caffarella and O'Donnell, 1987). She conceives self-directed learning as an attribute of personality which motivates the individual to continue learning through any number of methodologies rather than confining the concept to the mode of instruction. This broader framework suggests investigating entire conceptualization of what comes first: the skills to learn or motivation to learn; and, what is the role of skills in relation to the broad view of self-directed learning as a personality construct?

In the same vein, Cropley (1976), discussing learning throughout the life span, says learning is not restricted to a narrow process of acquiring knowledge; rather, it is concerned with motivation and personal growth in the cognitive, affective, and ethical domains. A unified concept of self-directed learning is enhanced, therefore, by considering a broad conception which focuses on individual's motivation to pursue learning throughout life rather than on

the ability of an individual to engage in episodes of self-instruction.

The self-directed learner has long been recognized as the humanistic ideal, the self-actualized person (Elias and Merriam, 1980). Humanistic ideal suggests that maturity brings intrinsic motivation to learn (Oddi, 1987). Both self- actualization and intrinsic motivation view share a common assumption: the salient feature of ongoing involvement in learning activities lies in the learner's personality. An early Houle study (1961) illustrates the essence of self-directed learning as an attribute of personality in his description of outstanding continuing learners who approach life with an air of openness and as inquiring mind. Skager (1979) holds the view that essential feature of self-directed learner's behavior is a willingness to initiate and maintain systematic learning on their own initiative.

Gibbons *et al.* (1980) identify higher level psychological needs as the source of self-directed learning behavior. Furthermore, they analyzed the content of 20 biographies of individuals who had become well-known authorities in an area of endeavor without formal training beyond high school. It was found that these individuals tended to share a number of similar characteristics apparently related to self-directedness such as: primary

experience in the area of expertise, industriousness, perseverance, curiosity, self-discipline, and creativity.

Research Trends in Self-directed Learning

More recently, research has moved away from the descriptive learning projects approach toward methodologies that have attempted to build a theoretical framework to understand self-directed learning (Brockett, 1985). First branch of the research stream is the qualitative approach adopted by Gibbons et al. (1980) and Quiroz (1987). Gibbons et al. analyzed the content of biographies of 20 well-known authorities and came up with the characteristics of self-directed learners. Quiroz interviewed 17 Michigan farmers and explored their perceptions about self-directed learner. Her findings corroborated with the eight factors of Self Directed Learners Readiness Scale (SDLRS) developed by Guglielmino (1978). These factors are: love of learning, self concept, tolerance of risk, creativity, view of learning, initiative, self- understanding, and acceptance of responsibility for one's own learning (Brockett, 1985). Second branch relates to the combination of qualitative and quantitative methods like the Brookfield study (1981). Brookfield conducted a semi-structured interview with 25 adults who were recognized as authorities in a wide range of vocational areas. A third branch of self-directed learning research has consisted of quantitatively oriented studies

that have examined the relationship between self-directedness and a wide range of psychosocial and educational variables. Since the development of SDLRS by Guglielmino (1977), as cited by Brockett (1985), various studies have found evidence that learner's perceptions of self-directedness are related to such factors as creativity (Torrance and Mourad, 1978), self-concept (Sabbaghian, 1978), actual involvement in learning project activity (Hassan, 1981), and motivational orientation (Reynolds, 1984).

Overview of Self-directed Learning

Despite dominant perspective to treat self-directed learning as a process, there has been constant effort to view this concept from holistic perspective. Self-directed learning as a process focuses on the skills and abilities needed to be self- directed learner and conceives it as an instructional process. The skills and abilities suggested by review of literature are: setting goals; identifying resources; evaluating success; chart one's own learning style; lead group discussion; relate to peer collaboratively; diagnose learning needs; and gain desired help. The personality perspective is oriented toward the study of the motivational, cognitive, and affective characteristics or personalities of self-directed learners. It conceives intrinsic motivation as the source of self-

directed learning. The characteristics of self-directed learner as identified by review of literature are: love of learning; self-concept as an effective learner; tolerance of risk; creativity, view of learning as a life long process; initiative; self-understanding; and acceptance of responsibility for one's own learning.

CHAPTER III

METHODOLOGY

The major purpose of this chapter is to describe the procedures used in conducting this research. Attention has been given to both the procedural aspects and to an explanation of the rationale that has been used as a basis for the collection and analysis of data.

This chapter is divided into five sections and provides an overview of the methods and procedures used in the study. The first section describes the nature of the study, the second section provides the rationale for sampling, and the third section outlines the process of instrumentation and measures taken to ensure validity and reliability. The fourth and fifth sections deal with the data collection and data analysis procedures respectively.

Nature of the Study

This study includes a combination of descriptive and analytical research. According to Issac and Michael (1975:6), descriptive research aims at describing systematically a situation or area of interest factually and accurately. Going a step further, Wimmer and Dominick (1987:102) note that descriptive research describes what exists at a given moment without any attempt to explain or make predictions about the results. Comparing that with

analytical research, Issac and Michael posit that analytical research describes and explains why the situation exists. This study, however, tends to rely on the features of both descriptive and analytical research in order to provide adequate information for better understanding the problems examined through the study.

Sampling Procedure

Population

Identification of the population is critical in the research process. According to Rossi (1983), there are two types of populations: the target population and the survey population. The target population is the collection of elements that a researcher would like to study. The survey population is the population that is actually sampled and from which data may be obtained. Babbie (1989:169) defines the target population as the theoretically specified aggregation of survey elements to which researchers wish to generalize the results of their research. Similarly, he defines the survey population as the aggregation of elements from which the survey sample is actually selected (Babbie, 1989:170).

Members of the small groups which met the criteria set by the study were the potential target population. The criteria set by the study were as follows: 1) small group size (5-25), 2) face- to- face interaction, 3) voluntary

membership, 4) frequent/repetitive interaction, 5) adults, 6) some form of structure, 7) set of functions, 8) roles and norms.

Various small groups engaged in community development activities in Michigan were sought and contacted to participate in the study. The Michigan Farm Bureau County Board, the County 4-H Council, the Cooperative Extension Service Programming Board, and the Soil Conservation District County Boards, were selected for this study. Thus, the survey population constituted of the members of these groups.

Sample

Babbie (1983:142) defines sampling as "selecting a given number of subjects from a defined population." The concept of sampling involves "taking a portion of the population, making observations on this smaller group, and then generalizing the findings to the parent population, or the larger population from which the sample was drawn" (Ary *et al.*, 1990:169).

It was particularly difficult to gather a list of all those in the survey population and to select the sample by simple random sampling. Moreover, the individuals for this study constitute a cluster insofar as they were alike with respect to the group criteria set by the study. This study, therefore, adopted cluster sampling. Cluster sampling is a

form of probability sampling where the unit chosen is not an individual but a group of individuals who are together (Ary *et al.*, 1990). Ary *et al.* (1990:175) state that "it is essential that the clusters actually included in the study be chosen at random from a population of clusters and once a cluster is selected, all the members of the cluster must be included in the sample."

In determining the sample from the Michigan Farm Bureau County Board members, regional clusters were considered. Two regions were selected randomly. One of the two was the central region. Considering the willingness of the central region representative to cooperate with this study, only the central region, consisting of the five groups of Ingham, Eaton, Clinton, Genesee, and Shiwassee counties, was retained for the study. Counties were considered as the cluster for selecting the County 4-H Council, the Cooperative Extension Service Advisory Committee Programming Board, and the Soil Conservation District. Jackson county was selected randomly which yielded three additional groups to be studied.

All members of the eight selected groups were considered as the sample for this study. To maintain the confidentiality of the groups' identity, analysis and presentation of the results was done by assigning a letter designation to each group. Hereafter, the groups are

referred to as group A, B, C, D, E, F, G and H. Table 1 shows total group size and a response rate for each group.

Table 1. Sample Distribution According to the Groups

Groups	Total members	Responses	
		Number	Percent
A	16	8	(50.00)
B	18	13	(72.22)
C	15	10	(66.67)
D	19	14	(73.68)
E	16	12	(75.00)
F	15	10	(66.67)
G	14	10	(71.43)
H	5	4	(80.00)
Total	118	81	(68.86)

Instrumentation

The development of the survey instrument was based primarily on the review of literature. Various indicators to measure the concepts under consideration were identified through the review of literature. The literature revealed that there are three possible sources for rating individual growth. One is the individual, the another is a manager/leader, and the third is a peer rating (Blank *et al.*, 1988). According to Blank *et al.*, self-rating provides the most intimate perception of a person's psychological

maturity. In this study, self-rating by the respondents was the source for measuring individual growth in terms of level of empowerment and self-directed learning.

Group Empowerment

Group empowerment was one of the two major variables of this study and was measured through the use of 20-items. These items were designed to assess the respondents' perceptions of how empowered their group was.

Respondents were asked to express their level of agreement to the statements that represent the measures of empowerment identified through the review of literature. The review of literature suggested the following as the measures of group empowerment:

- Opportunities for group members to make decisions;
- Opportunities for group members to reflect on ideas;
- Atmosphere that promotes willingness to learn;
- Mutual support between group members;
- Involvement of members in group activities;
- Collegiality between group members;
- Valuing of group members' experiences;
- Facilitative leadership;
- Valuing of individualized differences of group members;
- Atmosphere that promotes trust among group members.

For each measure, two question items were constructed. A Likert- type scale was used in these items. The term "Likert scale" is associated with a question format that is frequently used in survey questionnaires. Likert scales consist of a number of statements in respect to a topic, to which respondents could strongly agree, agree, be neutral, disagree or strongly disagree.

According to Wimmer and Dominick (1987:58), the Likert scale is the most commonly used in social research, because it allows for the weighing of each subject's responses. Subsequently, these can be added to produce a single score for the item as well as for the scale. Thus, the individual scores in this study were aggregated to form a group score. The items representing the measures of empowerment are as follows:

- Opportunity for group members to make decisions;
    1. Decisions in this group are influenced by all members
    2. There is opportunity for members to influence decisions
- Opportunity for group members to reflect on ideas
    1. Members in this group are encouraged to reflect on the group's activities
    2. Reflection is an important activity in this group
- Atmosphere to promote willingness to learn
    1. Members in this group show a willingness to learn
    2. In this group, members like to learn from each other

- Mutual support between group members

    1. Members in this group support each other
    2. Mutual support among members is important in this group

- Involvement of members in group activities

    1. Members of this group are encouraged to become involved in the work of the group
    2. Involvement of the members is important in this activity

- Collegiality between group members

    1. Working together is important in this group
    2. Members of this group seem to enjoy working with each other

- Valuing of group members' experiences

    1. This group values ideas from members who have had extensive experience
    2. The experience of the group members is important for the operation of the group

- Facilitative leadership

    1. Being a facilitator is important for the leader of this group
    2. The leader of this group works hard to be a facilitator

- Valuing of individual differences among members

    1. Individual differences are valued in this group
    2. Recognition of individual differences is a characteristic of this group

- Atmosphere of promoting trust among group members

    1. An important characteristic of this group is trust
    2. Trust is very important in this group

Two different types of scores were derived from the empowerment section of the instrument. First, an individual score measuring the respondent's perception of group

empowerment was computed by summing up the scores of the items responded to by the respondent. Second, a group score measuring the level of group empowerment was obtained by computing the mean of individual scores for each group.

Self-directed Learning

The second major variable of this study that was included in the instrument was self-directed learning. These items on the instrument attempted to measure the individual's view of his/her own self-directedness. This is shown as the level of agreement expressed by the respondents regarding a set of twelve measures of self-directed learning. The items representing these twelve measures were adapted from Caffarella and Caffarella (1986). There was one item for each of the twelve measures. The items were constructed using a Likert-type scale that was the same as the one used for the empowerment items. The measures are:

1. ability to realistically diagnose learning needs
2. ability to relate with others
3. initiative to use available resources
4. ability to identify the need to know
5. ability to identify the resources
6. ability to actually put to use new ways to learn
7. ability to draw knowledge and skill from the resources
8. ability to select best ways to learn
9. renewal of desire to learn

10. ability to evaluate learning
11. ability to relate to others in collaborative ways
12. ability to deal with personal issues

The responses for each item were summed up to get an aggregate score for self-directed learning.

Demographic Characteristics

Several authors, including Thomas and Fink (1963), Salter (1958), Hare (1962), Archer (1974), and Campbell (1976) suggest that certain group traits or personal characteristics are related to individual or group growth resulting from group activities. Group size, group age, frequency of meeting, years of membership, educational attainment, age of respondents, and gender were the demographic characteristics considered for this study

Group Size. This is the total number of members in the group. Group size determines group interaction. Too large a group tends to limit the possibility for group members to interact regularly in a direct and meaningful face-to-face manner.

Group Age. This is the total number of years of the group's operation. Group age refers to group maturity. Groups of varying age might be in different developmental

stages and thereby might have differential influence on their members.

Years of Membership. This is the total number of years/months the person has been a member of the group. Years of membership indicates the involvement of members in the group's activities.

Frequency of Meeting. This indicates how often the group meets. A higher frequency of meetings creates opportunities for more interaction among group members.

Educational Attainment. This is the educational background of the respondents expressed in six categories ranging from less than a high school degree to a graduate degree. Education enables individuals to acquire the knowledge, attitude, and skills needed to participate effectively in the community development process. Effective participation may be the vehicle for individual growth.

Age. This is the chronological age of the respondents. Age gives some indication of the maturity of the individuals.

Gender. This is the role associated with the sex of respondents. Contemporary feminist literature suggests that

women are disadvantaged and that there is discrimination between men and women in various spheres of social life. This sexual inequality might be manifested in small groups.

Michigan State University's Committee on Research Involving Human Subjects reviewed and approved the questionnaire. This insured that personal rights would not be violated by using this instrument (Appendix F).

Data Collection

A self-administered mail questionnaire was used for data collection. Dillman's (1978) recommendation for the total design method in survey design, distribution, and collection of data was followed and personalized as much as possible. The questionnaire package included the cover letter directed to each respondent (appendix B); a letter from the Michigan Farm Bureau Regional Representative (Appendix C) or the Jackson County Cooperative Extension Director (Appendix D); the questionnaire (Appendix A); and a self-addressed, stamped envelope.

The cover letter introduced the researcher and explained the purpose of the study. It assured complete confidentiality of the responses. An identification number was assigned to each questionnaire in order to facilitate the follow up procedure. The reason for this was explained to the respondent through the cover letter. The first mailing was made on March 10, 1993. By March 19, 1993, 35

percent of the questionnaires had been completed and returned. Each of the completed questionnaires was checked for proper completion and logged into a computer data file. This procedure was followed for each questionnaire as it was received.

The first follow-up package was sent on March 24 to those whose questionnaires had not been received. The follow-up package included a reminder letter (Appendix E), another copy of the questionnaire, and another self-addressed stamped envelope. By April 7, 67 percent of the questionnaires had been returned and found to be useable. On April 8 and 9, 20 percent of the nonrespondents were contacted by telephone reminding them of the questionnaire and urging them to complete the questionnaire as early as possible. Three questionnaires were returned by the Post Office as not deliverable. By April 16, a total of 81 completed questionnaires had been received yielding a response rate of 70.43 percent. Regarding an acceptable response rate, Babbie (1983:242) states, " I feel that a response rate of 50 percent is adequate for analysis and reporting. A response of 60 percent is good. And a response of 70 percent is very good." In light of Babbie's statement and because of time constraints, it was decided not to accept any additional questionnaires since a 70 percent response rate had been achieved.

Early respondents and late respondents were compared with respect to demographic characteristics and the relationship between empowerment and self-directed learning. No significant difference was found between them. Thus, as assumed by the study, it was inferred that the respondents represented an unbiased sample of all who had received the questionnaire.

Validity and Reliability

Validity

Validity is concerned with the extent to which an instrument measures what one thinks it is measuring (Ary, *et al.*, 1990:256). Essentially, this means that the relationship between concept and indicator is as close as intended. In ensuring the validity of the instrument, a combination of the use of a panel of experts, related literature, and an empirical approach was adopted.

In measuring group empowerment, indicators were identified according to the review of literature. Two items were developed for each indicator.

In measuring self-directed learning, the Self-Directed Learning Competencies Self-Appraisal Form (SDLCSAF), developed by Caffarella and Caffarella (1986), was adapted with slight modification.

A panel of experts from the Department of Agricultural and Extension Education, comprising of both professors and

graduate students, was presented with the indicators of the constructs and the corresponding items for each indicator. They were asked to comment on the instrument in terms of:

- clarity of wording;
- impressiveness of questionnaire to motivate people to answer;
- relatedness of indicators to the construct;
- relatedness of items to the indicators;
- general comments.

The instrument was revised based on the comments from the panel of experts. The revised instrument was pretested.

Pretesting

Pretesting of the instrument was done with a group of students at Michigan State University involved in on-campus Bible study groups. The size of these groups ranged from 5-12 and met weekly. A list of group members was obtained through the President of the group. A total of 32 members was randomly selected from the Bible study groups to participate in pretesting. In all, 24 people participated in pretesting during January, 1993.

Pretesting was done to ensure the internal consistency of the instrument and to assess the reliability of the instrument. Item analysis, an internal validation of the instrument, examines the extent to which the composite index is related to the questionnaire items included in the index

(Babbie, 1983). Item analysis typically yields three statistics for each item: (1) an item discrimination index, (2) the number/percentage of respondents marking each choice on an item, and (3) the item mean and standard deviation. The item discrimination index shows the extent to which each item discriminates among the respondents in the same way the total score does (Ary, *et al.*, 1990). An item-total correlation of 0.25 was considered as a cut-off point for selecting individual items, as recommended by Ary *et al.* (1990). Table 2 shows item-total correlation for empowerment while pre-testing the instrument.

Table 2. Item-total Correlation Coefficients for Group Empowerment.

Measures of Empowerment	Corr. Coeff.
1. Opportunities for group members for decision making.	
• Decisions in this group are influenced by all members (item #1 in questionnaire).	0.4124
• There is opportunity for members to influence decisions (item # 18).	0.4779
2. Opportunities for group members to reflect on ideas.	
• Members in this group are encouraged to reflect on group's activities (item #3).	0.4741
• Reflection is an important activity in this group (item # 11).	0.5030
3. Collegiality between group members.	
• Working together is important in this group.	0.3639
• Members of this group enjoy working with each other (item # 15).	0.3284
4. Atmosphere to promote willingness to learn from each other	
• Members of this group show willingness to learn from each other (item # 6).	0.4732
• In this group, members like to learn from each other (item #20).	0.6666
5. Atmosphere to promote trust among group members	
• An important characteristic of this group is trust (item # 8).	0.4578
• Trust is very important in this group (item # 16).	0.5666
6. Involvement of members in group activities	
• Members of this group are encouraged to become involved in the work of the group (item # 9).	0.5004
• Involvement of members is important in this group (item # 16).	0.4709

Table 2 (cont'd)

Measures of Empowerment	Corr. Coeff.
7. Valuing of experience of group members	
• This group values ideas from members who have had extensive experience (item # 12).	0.4874
• The experience of the group members is important for this group (item # 23).	0.4950
8. Valuing of individual differences among members	
• Individual differences are valued in this group (item # 28).	0.6551
• Recognitiion of individual differences is a characteristic of this group (item # 32).	0.5453
9. Facilitative leadership	
• Being a facilitator is important for the leader of this group (item # 22).	0.4130
• The leader of this group works hard to be a facilitator (item # 30).	0.6337
10. Mutual support between group members	
• Members of this group support each other (item # 13).	0.6562
• Mutual support among members is important in this group (item # 18).	0.6617

As shown in Table 2, all group empowerment items showed an item-total correlation higher than 0.25.

Table 3 shows item-total correlation for self-directed learning instrument.

Table 3. Item-Total Correlation Coefficients for Self-Directed Learning

Measures of Self-Directed Learning	Corr. Coeff.
1. Ability to realistically diagnose learning needs	0.8003
2. Ability to relate with others	0.5163
3. Initiative to use available resources	0.6148
4. Ability to identify the need to know	0.6053
5. Ability to identify the resources	0.6010
6. Ability to actually put to use new ways to learn	0.7444
7. Ability to draw knowledge and skill from the resources	0.7250
8. Ability to select best ways to learn	0.8121
9. Renewal of desire to learn	0.7352
10. Ability to evaluate learning	0.6321
11. Ability to relate to others in collaborative ways	0.6184
12. Ability to deal with personal issues	0.6988

As shown in Table 3, all the items of self-directed learning showed an item-total correlation coefficient higher than 0.25. The other statistic considered in the item analysis was standard deviation. Items in which the respondents were spread out among the response categories were preferred over the items on which the response categories were clustered in one or two categories (Ary *et al.*, 1990).

While the item analysis is an important step of instrument validation, it is scarcely a sufficient test. If the instrument adequately measures a given variable, it should successfully predict other indicators of that variable (Babbie, 1983). This is the construct validity of the instrument.

The construct-related approach for validity is important because it focuses attention on the role of theory in test construction and the need to formulate hypotheses that can be investigated as part of the validation process. The hypothesized relationship between empowerment and self-directed learning was investigated as part of the construct validation process. A moderate correlation between group empowerment and self-directed learning indicated the test of construct validity. This process was repeated in the analysis of the main survey.

Reliability. Reliability refers to the extent to which the instrument yields the same results in repeated tests. The more consistent the results of the instrument, the higher the reliability of the instrument will be. Cronbach's alpha was used to assess the homogeneity measure of reliability. Cronbach's alpha is used when measures have multiple scored items, such as a Likert-type scale (Ary *et al.*, (1990). An alpha of 0.70 was set as an acceptable level of reliability.

Table 4 shows Croanbach's alpha for the group empowerment and the self-directed learning items.

Table 4. Croanbach' alpha-

Items	Alpha
Empowerment	0.8874
Self-directed learning	0.9201

As shown in Table 4, both sets of items had an alpha higher than 0.70. Thus, both set of items were within the acceptable limit of reliability.

Item analysis was also done in the final survey. It revealed higher internal consistency and reliability (Appendix G and H).

Analysis and Presentation of Results

The statistical package for the social sciences (SPSS pc+) was used to analyze the data. Data were analyzed and organized according to the research questions of the study. However, general descriptions of demographic characteristics preceded other results.

Descriptive statistics were used to present the demographic characteristics of the respondents and the participating groups. In order to analyze the level of variation in group empowerment and self-directed learning, descriptive statistics were used. One-way analysis of

variance was used to see the differences among the groups in terms of group empowerment.

The Spearman correlation coefficient was used to examine the relationship between the respondents' perceptions of group empowerment and self-directed learning. This relationship was analyzed in four steps: between composite scores of empowerment and composite scores of self-directed learning; between measures of empowerment and composite scores of self-directed learning; between measures of self-directed learning and composite scores of empowerment and between measures of empowerment and self-directed learning.

One-way analysis of variance was used to see if the level of empowerment and self-directed learning varied with the level of education. In the same way, a t-test was used to see if the level of empowerment and self-directed learning varied with gender. The Spearman correlation coefficient was used to analyze the relationship between age of respondents and empowerment; years of membership and empowerment; age of respondents and self-directed learning; and years of membership and self-directed learning.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter presents the findings of the study. Attention is given to the analysis and interpretation of data in accordance with the research questions set in chapter I. The findings are presented in the following order:

1. General description of the respondents.
2. Variation in the level of empowerment.
3. Variation in the level of self-directedness in learning.
4. Relationship between group empowerment and self-directedness in learning.
5. Relationship of demographic characteristics with both Group empowerment and self-directedness in learning.

General Description of the Respondents

Age

The mean age of respondents was 41.66 years with a standard deviation of 13.93 ranging from 21 to 75 years. The respondents were further categorized into the following age groups:

1. youngest through 29 years;
2. 30 through 39 years;
3. 40 through 49 years;

4. 50 through 59 years;

5. 60 through 69 years; and

6. over 70 years.

Table 5 shows the distribution of respondents according to age category.

Table 5. Distribution of Respondents According to Age Category

Age Category	Number	Percent
youngest through 29	10	(12.3)
30 through 39	30	(37.0)
40 through 49	22	(27.2)
50 through 59	6	(7.4)
60 through 69	9	(11.1)
Over 70	4	(4.9)
Total	81	(100.0)

As shown in Table 5, greatest proportion of respondents, 76.5 percent, was below the age of 50. There were four respondents above the age of 70.

Gender

The distribution of respondents according to gender is shown in table 6.

Table 6. Distribution of Respondents According to Gender

Gender	Number	Percent
Male	55	(67.9)
Female	26	(32.1)
Total	81	(100.0)

As presented in Table 6, approximately one-third of the respondents were females. This shows a predominance of males in farm-related groups.

Educational Background

Respondents were asked to indicate their educational background in terms of the following levels:

1. less than high school;
2. high school degree;
3. some college study;
4. college degree;
5. graduate study;
6. graduate degree.

The educational backgrounds of the respondents are shown in Table 7.

Table 7. Distribution of Respondents According to Level of Education

Level of Education	Frequency	Percent
High school degree	20	(24.70)
Some college study	32	(39.50)
College degree	17	(20.99)
Graduate study	7	(8.64)
Graduate degree	5	(6.17)
Total	81	(100.00)

As shown in Table 7, the greatest proportion of respondents, 75 percent, had exposure to a college education. Only one-fourth of the respondents held high school degrees. None of the respondents had less than a high school education. This suggests that the respondents were able to comprehend the questionnaire, and that the responses reflected their own views.

Years of Membership

Years of membership relates to the number of years the respondents were involved with a group. Table 8 depicts the distribution of respondents according to their years of membership.

Table 8. Distribution of Respondents according to Years of Membership

Years of membership	Number	Percent
1 to 5 years	51	(63.00)
6 to 10 years	20	(24.70)
11 to 15 years	1	(1.20)
16 to 20 years	3	(3.70)
more than 20 years	6	(7.40)
Total	81	(100.00)

Mean 6.56 years
Standard deviation 8.23
Range 1-44

As shown in Table 8, the greatest proportion of respondents, 63 percent, were involved less than five years in their groups. About one-fourth of the respondents held the membership between 6 to 10 years. On an average, the respondents remained members of their groups for 6.56 years with the standard deviation of 8.23 and a range of 1-44 years.

Variation in the Level of Perceived Group Empowerment

In order to assess the variation in the level of perceived group empowerment, Composite Empowerment Scores were computed by adding each respondent's response for each of the twenty statements. Since each item received a score of 1 to 5, a minimum possible Empowerment Score could be 20

and a maximum possible Empowerment Score could be 100. Then higher the empowerment Score, the higher the level of group empowerment was perceived by the respondent. These data are shown in Table 9.

Table 9. Distribution of Respondents according to the Perceived Level of Group Empowerment

Level of Empowerment	Mean Emp. Score	Frequency	Percent
Low	<64	9	(11.10)
Medium	64-91	64	(79.00)
High	>91	8	(9.90)
Total		81	(100.00)

Mean 79.14 Range 27-99
S. D. 13.00

As shown in Table 9, the mean score was 79.14 with a standard deviation of 13. Respondents whose scores fell one standard deviation or more above the mean were considered to perceive their group in the "high" level of empowerment range, those with one standard deviation or more below the mean were considered to perceive their group in the "low" level of empowerment range. And those whose Empowerment Scores fell in between were considered to be in the "medium" level of empowerment. Cut- off Empowerment Scores for the medium and high levels were 64 and 92. The greater majority of respondents, 79 percent, perceived that the level of empowerment in their group was medium.

The pattern of variation across the groups was also analyzed. The majority of respondents in all the groups felt that the level of empowerment in their groups was medium. However, there was some variation in the pattern as shown in Table 10. None of the respondents in group E, C, nor group A felt that the level of empowerment in their groups was low. Conversely, none of the respondents in group B, H, nor the group G considered that the level of empowerment in their groups was high.

Table 10. Level of Perceived Group Empowerment Across Groups

Groups	Level of Group empowerment					
	Low		Medium		High	
	N	%	N	%	N	%
A (n=8)	-	-	6	(75.0)	2	(25.0)
B (n=13)	2	(15.4)	11	(84.6)	_	_
C (n=10)	_	_	9	(90.0)	1	(10.0)
D (n=14)	2	(14.3)	10	(71.4)	2	(14.3)
E (n=12)	_	_	9	(75.0)	3	(25.0)
F (n=10)	1	(10.0)	9	(90.0)	_	_
G (n=10)	2	(20.0)	8	(80.0)	_	_
H (n=4)	2	(50.0)	2	(50.0)	-	_
Total (n=81)	9	(11.1)	64	(79.0)	8	(9.9)

The foregoing analysis of variation in group empowerment focuses on the variations of individual perceptions of group empowerment. It was also necessary to know where the groups' perceptions stood regarding the levels of group empowerment. A group mean of the individual composite scores was taken as the basis for ranking the groups in terms of levels of group empowerment. The mean Group Empowerment Scores can be seen as differing from one another. Are the differences among the mean Group Empowerment Scores great enough to be statistically significant, or is it likely that they occurred by chance? To answer these questions, as shown in Table 11, a one-way analysis of variance was done. A multiple range test with

Tukey procedure was used to identify the groups which differed significantly from each other. The groups were ranked on the basis of their mean group empowerment score.

Table 11. One-way Analysis of Variance of Group Empowerment

Source	DF	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	7	3423.32	489.0453	3.5452	0.0025
Within Groups	72	9932.17	137.95		

Multiple Range Test: Tukey procedure

Group	Mean	Groups H	G	D	F	B	C	E	A
H	57.5								
G	72.5								
D	76.6								
F	78.3								
B	81.4	*							
C	83.0	*							
E	84.9	*							
A	86.3	*							

* Denotes pairs of groups significantly different at .05 level

Findings revealed that the group A was the most empowering of all the groups and that the group H was the least empowering.

Variation in the Level of Self-Directed Learning

A similar procedure, as was used in assessing the level of empowerment, was followed in analyzing variation in the level of self-directedness in learning. Table 12 shows the distribution of respondents according to the levels of self-directedness in learning (SDL).

Table 12. Distribution of Respondents according to the Levels of Self-directedness in Learning

Level of SDL	SDL Score	Number	Percent
Low	<35	13	(16.0)
Medium	35-52.4	55	(67.9)
High	>52.4	13	(16.0)
Total		81	(100.0)
Mean	43.78	Range 18-60	
S.D.	8.61		

As shown in Table 12, the mean Self-Directed Learning Score (SDLS) was 43.78 with standard deviation of 8.61 ranging from 18 to 60. Cut-off SDL Scores for the medium and high levels were 35 and 52.4. Findings showed that about two-thirds of the respondents considered themselves in the medium level of self-directedness in learning.

Variation in the levels of self-directedness in learning across groups was also assessed. This is shown in Table 13.

Table 13. Level of Self-Directedness in Learning across Groups

Groups	Level of Self-directed Learning across Groups					
	Low		Medium		High	
	N	%	N	%	N	%
A (n=8)	2	(25.0)	2	(25.0)	4	(50.0)
B (n=13)	2	(15.4)	9	(69.2)	2	(15.4)
C (n=10)	-	-	10	(100.0)	-	-
D (n=14)	2	(14.3)	11	(78.6)	1	(7.1)
E (n=12)	-	-	10	(83.3)	2	(16.7)
F (n=10)	1	(10.0)	6	(60.0)	3	(30.0)
G (n=10)	5	(50.0)	4	(40.0)	1	(10.0)
H (n=4)	1	(25.0)	3	(75.0)	-	-
Total (n=81)	13	(16.0)	55	(69.90)	13	(16.0)

Table 13 shows that the greatest proportion of respondents in the group A, 50.0 percent, felt their level of self-directedness in learning was high. On the contrary, 50 percent of the respondents, from the group G felt that their level of self-directedness in learning was low. The majority of respondents in other groups expressed the feeling that their level of self-directedness in learning was medium.

Ranking the groups to know their standing of the groups in terms of the percentage of respondents with relatively higher levels of Self-Directed learning was done by taking the weighted percentage total for each group. A low level of Self-Directed learning was assigned a weight of 1, a

medium level- 2, and the high level was assigned a weight of 3. Then, the percentage in each cell in Table 13 was multiplied to get the total weighted scores as shown in Table 14. Since the percentage in each cell could vary from 0 to 100, the possible weighted total scores, thus, could vary from 100 to 300. The higher the weighted score, the higher the standing of the group was in terms of respondents with relatively higher levels of self-directed learning.

Table 14. Weighted SDL Scores across Groups

Groups	Weighted SDL Scores
G	160.0
H	175.0
B	190.0
D	192.8
C	200.0
E	216.0
F	220.0
A	225.0

As shown in Table 14, the group A stands first followed by the group F, then the group E, C, D, B, H, and the group G.

Relationship between Group Empowerment and Self-Directed Learning

Identification of the possible relationship between empowerment and self-directedness in learning was the central objective of the study. A Pearson product-moment correlation was done to see the relationship between these two variables. In interpreting the correlation coefficient, descriptors proposed by Davis (1971) were followed. This is the most commonly used convention for describing measures of association. The kinds of descriptors of correlation coefficients (whether positive or negative) are as follows:

Coefficient	Descriptors
0.70 or higher	very strong association
0.50 to 0.69	substantial association
0.30 to 0.49	moderate association
0.10 to 0.29	low association
0.01 to .09	negligible association

The relationship was analyzed in four stages. In the first stage, Empowerment Scores were correlated with the Self-Directed Learning Scores as shown in Table 15.

Table 15. Correlation between Total Group Empowerment Score and Total Self-Directed Learning Score

	Corr. Coeff
Total Empowerment Score	0.6321**

** significant at .001 level

A correlation coefficient of 0.6321, significant at 0.001 level, was obtained. This revealed that there is a substantial association between group empowerment and self-directedness in learning.

In the second stage, individual item scores of group empowerment were correlated with the total Self-Directed Learning Scores in order to identify the indicators that have relatively higher association with self-directedness in learning. The Pearson product-moment correlation coefficients are shown in Table 16.

Table 16. Correlation between Individual Measures of Empowerment and total Self-Directed Learning Score

Measures of Empowerment	Corr. Coeff.
1. Opportunities for group members for decision making.	
• Decisions in this group are influenced by all members (item #1 in questionnaire).	0.4145**
• There is opportunity for members to influence decisions (item # 18).	0.4934**
2. Opportunities for group members to reflect on ideas.	
• Members in this group are encouraged to reflect on group's activities (item #3).	0.4313**
• Reflection is an important activity in this group (item # 11).	0.3110*
3. Collegiality between group members.	
• Working together is important in this group.	0.4642**
• Members of this group enjoy working with each other (item # 15).	0.4028**
4. Atmosphere to promote willingness to learn from each other	
• Members of this group show willingness to learn from each other (item # 6).	0.4251**
• In this group, members like to learn from each other (item #20).	0.5591**
5. Atmosphere to promote trust among group members	
• An important characteristic of this group is trust (item # 8).	0.3930**
• Trust is very important in this group (item # 16).	0.3884**
6. Involvement of members in group activities	
• Members of this group are encouraged to become involved in the work of the group (item # 9).	0.4513**
• Involvement of members is important in this group (item # 16).	0.4771**

Table 2 (cont'd)

Measures of Empowerment	Corr. Coeff.
7. Valuing of experience of group members	
• This group values ideas from members who have had extensive experience (item # 12).	0.3890**
• The experience of the group members is important for this group (item # 23).	0.5339**
8. Valuing of individual differences among members	
• Individual differences are valued in this group (item # 28).	0.5584**
• Recognitiion of individual differences is a characteristic of this group (item # 32).	0.3454**
9. Facilitative leadership	
• Being a facilitator is important for the leader of this group (item # 22).	0.5859**
• The leader of this group works hard to be a facilitator (item # 30).	0.3469**
10. Mutual support between group members	
• Members of this group support each other (item # 13).	0.4251**
• Mutual support among members is important in this group (item # 18).	0.3733**

* sig. at 0.01 level; ** sig. at 0.001 level

Findings reveal that there is a moderate to substantial association between all 20 individual items of empowerment and self-directedness in learning. Willingness to learn from each other, valuing of individual differences, and facilitative leadership seemed to have substantial associations. All items were significant at the 0.001 level of significance.

In the third stage, a correlation was made between the 12 measures of self-directed learning and the total Group Empowerment Scores. All the items of self-directed learning showed moderate to substantial association with group empowerment. This is shown in Table 17.

Table 17. Correlation between Measures of Self-Directed Learning and Total Group Empowerment Scores

Measures of Self-directed Learning	Corr. Coeff.
1. Ability to realistically diagnose learning needs	0.4889**
2. Ability to relate with others	0.5669**
3. Initiative to use available resources	0.3751**
4. Ability to identify the need to know	0.5627**
5. Ability to identify the resources	0.3897**
6. Ability to actually put to use new ways of learning	0.5945**
7. Ability to draw knowledge and skills from the resources	0.5319**
8. Ability to select the best ways to learn	0.5718**
9. Renewal of desire to learn	0.4583**
10. Ability to evaluate learning	0.4597**
11. Ability to relate to others in collaborative way	0.4391**
12. Ability to deal with personal issues	0.5353**

** significant at .001 level

As shown in Table 17, all the measures were significant at the 0.001 level of significance. Six of the twelve

measures showed substantial associations with group empowerment. These measures were:

- ability to relate to others who may be able to help learn new things;
- ability to identify what one needs to know;
- ability to actually put to use new ways of learning;
- ability to draw knowledge and skill from the resources;
- ability to select best ways of learning; and
- becoming effective in dealing with personal issues that block learning.

The other six showed moderate associations.

Correlations were observed between the items of empowerment and the items of self-directedness in learning (Appendix I). Items of self-directedness in learning reflect the competencies needed to be a self-directed learner. The purpose of delineating the correlations among individual items is to identify the competencies which have relatively higher correlation with different measures of empowerment. Opportunity for decision-making, involvement in group activities, and facilitative leadership seemed to bear a substantial relationship with the ability of relating to others (item # 4).

The ability to identify what one needs to know (item # 10) showed a substantial relationship with the involvement of members in group activities. The ability to actually put

to use new ways of learning (item # 17) had a substantial relationship with valuing of individual differences. It showed a moderate association with the rest of the items of empowerment.

The ability to draw knowledge and skill from the resources (item # 21) had a substantial relationship with facilitative leadership and the willingness to learn from each other. Likewise, the ability to select the best ways to learn (item # 24) had a substantial relationship with facilitative leadership and the willingness to learn from each other.

Competencies in dealing with personal issues (item # 27) was found to have a substantial relationship with the willingness to learn from each other and the valuing of individual differences. Based on the magnitude of the correlation observed among different items of empowerment and self-directedness in learning, the following measures of empowerment seem to have a relatively higher contribution toward self-directedness in learning. These are:

- facilitative leadership;
- willingness to learn from each other;
- valuing of individual differences;
- involvement in group activities;
- opportunity for decision-making

Relationship between Demographic Characteristics and Empowerment

Age, years of membership with the group, level of education, and gender were the demographic characteristics of the respondents studied. Group characteristics such as group size (Table 1), group age, and frequency of meeting, did not show much variation. Therefore, these variables were not included in the delineation of relationships with other variables.

The fourth research question sought to identify the possible relationship between group empowerment and demographic characteristics of respondents. Table 18 shows the Pearson product-moment correlation coefficients between group empowerment and the demographic characteristics of age and years of membership.

Table 18. Correlation Coefficients of Age and Years of Membership with Empowerment

Characteristics	Correlation Coefficient
Age	0.1284
Years of membership	0.2339*

* significant at 0.05 level

Findings show that age and years of membership have low positive associations with empowerment. However, the relationship between years of membership and group

empowerment is significant at 0.05 level. This indicates that the members with longer period of involvement with the group see the group as more empowering.

A t-test was done to see if males and females differed in the perception of the level of empowerment in the group as shown in Table 19.

Table 19. T-test comparing Gender with respect to Empowerment

Group	Mean	SD	t value	DF	2-tail prob.
Male (55)	80.28	13.70	1.13	79	0.262
Female (26)	76.92	11.52			

Results indicated that there is no significant difference between males and females with regard to the level of empowerment ($p>.05$).

A One-way Analysis of Variance (ANOVA) was done to see if group empowerment differed with levels of education. Table 20 shows a one-way analysis of variance of the levels of education with respect to empowerment.

Table 20. One-way Analysis of Variance of the levels of Education with respect to Empowerment

Source	D.F	Sum of squares	MS	F ratio	F prob.
Between groups	4	224.26	56.06	0.3161	0.87
Within groups	74	1312.93	177.34		
Total	78	13347.19			

Results revealed that there is no significant difference between the levels of education and group empowerment, indicating that the respondents with a low level of education did not differ from the respondents with higher levels of education. Thus, the implication is that the level of education bears no relationship with group empowerment.

Relationship between Demographic Characteristics and Self-Directedness in Learning

Age, level of education, years of membership, and gender were analyzed in terms of their relationship with self-directedness in learning. The fourth research question sought to find out the relationship between demographic characteristics and self-directedness in learning. A Pearson product-moment correlation was used to analyze the relationship of self-directedness in learning with age and years of membership, as shown in Table 21.

Table 21. Correlation Coefficients of Age and Years of Membership with respect to Self-directed Learning

Characteristics	Correlation coefficients
Age	0.0392
Years of membership	0.3141*

* significant at .01 level

Results indicated that there is negligible association between the ages of the respondents and self-directedness in learning. However, years of membership showed moderate association, significant at the 0.01 level of significance.

The seventh research question sought to know if self-directed learning differed with respect to the level of education and gender. A One-way Analysis of Variance was done to see if self-directedness in learning differed with levels of education, as shown in Table 22.

Table 22. One-way Analysis of Variance of Levels of Education with respect to Self-directed Learning

Source	DF	Sum of square	MS	F	P
Between groups	4	124.85	31.21	0.4031	0.81
Within groups	75	5807.64	77.43		
Total	79	5932.49			

Table 22 shows that there is no significant difference in self-directed learning with respect to levels of education ($p>0.05$).

A t-test was done to see if males and females differed in self-directedness in learning. Table 23 shows the results of the t-test.

Table 23. T-test comparing Gender with respect to Self-Directed Learning

Group	Mean	SD	T-value*	DF	2-tail prob.
Male (55)	44.16	8.20	0.742	78	0.755
Female (26)	43.48	9.36			

* pooled variance estimate

As shown in Table 23, there is no significant difference between males and females in terms of self-directedness in learning ($p> 0.05$).

Regression Analysis

The foregoing analysis revealed that empowerment and years of membership bear substantial and moderate relationships with self-directedness in learning, respectively. If there is confounding effect between these variables, the real effect would be obscured. Therefore, in order to see the effect of one variable controlling the other, a regression analysis was done treating self-

directedness in learning as a dependent variable, and empowerment, age, level of education, gender, and years of membership as independent ones. This regression analysis is shown in Table 24.

Table 24. Multiple Regression of a set of Variables with Self-Directed Learning

Variables	B	SE B	Beta	T	Sig T
Empowerment	0.418	0.063	0.586	6.503	0.000
Gender	0.113	1.655	0.006	0.068	0.946
Level of educ.	0.147	0.693	-0.019	-0.212	0.832
Age	-0.089	o.063	-0.143	-1.418	0.160
Years in group	0.250	0.108	0.238	2.324	0.023

Multiple R	0.665
R square	0.443
Adjusted R square	0.405
Standard error	6.726

As shown in Table 24, empowerment and years of membership, when compared with self-directedness in learning, have a significant relationship, as the probability is less than 0.05. The other variables of age, level of education, and gender, bear no significant relationship.

A regression analysis was also done treating group empowerment as a dependent variable and self-directed learning, age, education, years of membership, and gender as independent variables. Table 25 shows the multiple

regression of a set of variables with respect to group empowerment.

Table 25. Multiple regression of a Set of Variables with respect to Group Empowerment

Variables	B	Beta	T	Sig T
Self-dir. learning	1.119	0.738	6.385	0.000
Gender	-1.777	-0.059	-0.548	0.587
Level of education	-2.792	-0.210	-0.1.989	0.0564
Age	0.063	0.058	0.428	0.671
Years of membership	-0.125	-0.094	-0.681	0.051
(Constant)	40.119		3.807	0.005

Multiple R	0.785
R Square	0.616
Adjusted R Square	0.563
Standard Error	8.989

As shown in Table 25, only self-directed learning and yearsin group are significantly related to empowerment. The rest of the variables do not bear any significant relationship with group empowerment. This result is consistent with the foregoing analyses such as: correlational analyses, analysis of variance, and t-test analysis.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Summary

Three goals were defined for this study. The first goal was to find out to what extent can the participation of individuals in group interaction enhance their own growth. Secondly, it sought to identify the demographic characteristics that relate to group empowerment and self-directed learning. Thirdly, it sought to find out if learning takes place in group interaction. The following research questions emanated from these goals:

1. Does individual perception vary with respect to the level of group empowerment?
2. Is there any variation in the perceived level of self-directed learning?
3. What is the relationship between group empowerment and demographics?
4. Does self-directed learning relate to the demographic characteristics of group members?
5. Is there any relationship between group empowerment and self-directed learning?

This was a descriptive study. The target population for this study was the members of small groups which have the following attributes:

- group size 5-25;

- face-to-face interaction;
- frequent/repetitive interactions;
- some form of structure;
- set of goals;
- set of functions; and
- norms and roles

Members of the Michigan Farm Bureau County Boards, members of the 4-H Council, members of the Cooperartive Extension Service County Advisory Committee Programming Board, and members of the Soil Conservation District Board were the survey population for this study. In all, eight groups participated in the study. The MFB County Boards from the Central Region consisting of Ingham county, Eaton county, Clinton county, Genesee county, and Swiawassee county constituted five of the eight groups. The other three groups were the Programming Board, 4- H Council, and the SCD Board from Jackson county.

The method of cluster sampling was used to select the sample for this study from the eight groups' group members. As suggested by the procedure of cluster sampling, the Central Region and Jackson county were selected randomly and all the members of these randomly selected groups were included in the study. The sample size was 118. A total of 81 group members responded to the survey instrument and participated in the study. In order to maintain confidentiality in the analysis and presentation of the

results, the groups are arbitrarily referred to as groups A, B, C, D, E, F, G, and H.

The instrument for data collection was a self-administered mailed questionnaire. The instrument included 20-items to measure perceived group empowerment, 12-items to measure perceived self-directed learning and seven questions regarding demographic information. The items for group empowerment were developed according to the review of literature. Altogether, ten indicators of group empowerment were identified. Two items were developed for each indicator. The self-directed learning items were adapted and modified from the instrument developed by Caffarella and Caffarella. These two sets of items were mixed in the questionnaire in order to get an unbiased response. The group empowerment and self-directed learning items were constructed on a 5-point Likert-type scale. All the items were in the form of statements to which the responses could vary from strongly agree to strongly disagree.

Consultation was done with both the professors and the graduate students at the Department of Agricultural and Extension Education at Michigan State University to validate the instrument. After incorporating their comments, the instrument was pre-tested with members of the Michigan State University Bible Study Group. A total of 24 members participated in pre-testing. An analysis of the group empowerment items yielded a reliability coefficient,

Croanbach's alpha, of 0.89. This was 0.92 for the self-directed learning items. An alpha of 0.70 was set as an acceptable reliability coefficient. Item-total correlation coefficients for each of the group empowerment and self-directed learning items were higher than 0.25. An item-total correlation coefficient of 0.25 was considered a basis for selecting the items. The items which had item-total correlation coefficients lower than 0.25 were supposed to be discarded.

Frequency distribution, descriptive statistics such as mean, standard deviation, and range, Pearson product-moment correlation, t-test, one-way analysis of variance, and regression analysis were used to analyze and interpret the results. An SPSS pc+ computer program was used to analyze the data.

Findings show that a greater proportion of the respondents, 76.5 percent, were below the age of 50. The mean age of the respondents was 41.6 years with a standard deviation of 13.93 ranging from 21 years to 75 years. Of the total respondents, 32.1 percent were women. A greater proportion, 75 percent, had exposure to a college education, and 15 percent had pursued graduate studies. The average involvement of the respondents with the group was 6.5 years with a standard deviation of 8.23. However, a greater proportion, 63 percent, were involved less than five years.

The first research question of this study was directed toward the variation in the levels of group empowerment. Group empowerment was delineated into three levels: high, medium and low. The respondents, whose empowerment scores fell one standard deviation above the mean empowerment score, were considered to perceive their group in the high level of empowerment range. The respondents, whose empowerment scores fell one standard deviation below the mean empowerment score were considered to perceive their group in the low level of empowerment range. And, those whose scores fell in between were considered to perceive their group in the medium range. The greatest majority of respondents, 79 percent, perceived that the empowerment in their group was medium. The groups were ranked on the basis of mean group empowerment scores. Group A had the highest mean group empowerment score and group H had the lowest mean group empowerment score. A one-way analysis of variance with a Tukey multiple range test showed that the mean group empowerment score of group H was significantly different from the mean group empowerment scores of groups A, B, C, and E.

The second research question asked about the extent of variation in the levels of self-directed learning among group members. About two-thirds of the respondents considered themselves in the medium level of self-directedness in learning. To know their standing in terms

of the proportion of respondents with relatively higher levels of self-directed learning, the groups were ranked. Group A ranked highest, followed by group F, then groups E, B, D, H, and G.

The third research question of the study sought to identify the possible relationship between group empowerment and demographic characteristics of the respondents (age, gender, years in group, and level of education). A Pearson product-moment correlation was done to find the relationship between group empowerment with the age of respondents, and with years in their group. A t-test was done to determine whether males and females differed in their perceptions of group empowerment. A one-way analysis of variance was done to see if perceived group empowerment varied with the level of education. Age, gender, and level of education were not significantly related to group empowerment. However, there was a low but significant relationship between years in a group and group empowerment.

The fourth research question seeked to identify the relationship between self-directed learning and demographic characteristics. A Pearson product-moment correlation was conducted to find the relationship of self-directed learning with the age of respondents and with years in a group. A t-test was done to see if males and females differed in their perceptions of self-directed learning. A one-way analysis of variance was done to see if perceived self-directed

learning varied with levels of education. Age, gender, and level of education were not significantly related to self-directed learning. However, there was a moderate relationship between self-directed learning and years in a group, significant at the 0.01 level.

The fifth research question sought to identify the possible relationship between group empowerment and self-directed learning. A Pearson product-moment correlation was used to analyze the relationship in four stages. In the first stage, composite empowerment scores were correlated with the composite self-directed learning scores. A correlation coefficient of 0.6321 was obtained. This was significant at the 0.001 level. This suggested a substantial relationship between group empowerment and self-directed learning.

In the second stage, 20 individual items of group empowerment were correlated with the composite scores of self-directed learning. The correlation coefficients varied from 0.311 to 0.5859. All items were significant at 0.01 or higher levels of significance. This indicated moderate to substantial association between the individual items of empowerment and self-directed learning. The items which showed substantial association were: willingness to learn from each other, valuing of individual differences, and facilitative leadership.

In the third stage, 12 individual items of self-directed learning were correlated with the composite scores of group empowerment. The correlation coefficients varied from 0.3751 to 0.5945. All the items were significant at the 0.001 level. This indicated a moderate to substantial association between individual items of self-directed learning and group empowerment. The items which showed substantial association were: ability to relate to others who may be able to help learn new things; ability to identify what one needs to know; ability to actually put to use new ways of learning; ability to draw knowledge and skill from the resources available; ability to select the best ways to learn; and becoming effective in dealing with personal issues that block learning.

In the fourth stage, a correlation was done between individual items of group empowerment and individual items of self-directed learning. A moderate to substantial association was observed among different pairs of items.

The foregoing analysis of association and difference was confined only to the two variables in question. It did not take into consideration the effect of other variables. Therefore, in order to see the relationship of a set of independent variables in relationship to each other and to a dependent variable, a regression analysis was done. In the first place, group empowerment, age of respondent, level of education, gender, and years of membership were treated as

independent variables, whereas self-directed learning was treated as a dependent one. Regression analysis between the set of independent variables and the dependent variable showed that only group empowerment and years of membership had a significant relationship with self-directed learning. Likewise, a regression analysis was done between self-directed learning, age, levels of education, gender, and years of membership as the independent variable and group empowerment as the dependent variable. The analysis showed that self-directed learning and years of membership showed a significant relationship with group empowerment.

Conclusions

This section presents the conclusions based on the findings of this study. Conclusions also reflect the judgement of the researcher about the findings. Each finding is supplemented with a conclusion.

Conclusion # 1

As revealed by the findings of this study, group members who perceive their group as being more empowering tend to perceive themselves as more self-directed. This finding reflects individual perceptions of group empowerment and self-directed learning.

The nature of the group determines the character of its impact on the development of its members. The values of the

group, the stability of values, the group atmosphere, and the nature of conformity demanded by the group determine whether a group is likely to have a positive or negative impact upon the growth and behavior of its members. This finding is in consistent with the view expressed by Likert (1991) as he states "if the values of the group are seen by the members as having merit, if the group is warm, supportive, and full of understanding, the group's influence on the development of its member will be positive." The groups that place high value on empowerment tend to create a supportive environment for the growth of individuals. This individual growth culminates in self-directedness among members.

The extent to which an individual accepts and internalizes the group's values will shape his/her perception of the groups. Furthermore, individual perceptions will also be affected by the matching of group and individual values. When individual values match with the group's values, the individual will perceive the group more positively. Therefore, it is important for a group facilitator to have a thorough understanding of the individual members' value systems. This will help to devise strategies to move the group process ahead while keeping consistent with the group's values.

Conclusion # 2

Groups which are high in empowerment also have a higher proportion of self-directed members. This reflects group characteristics rather than individual perceptions.

When the group has self-directed members, the relationship of the members within the group is that of inter-dependence. The contribution of each member is equally important for the group's growth. In a dependent group, task functions are leader oriented and the group may disintegrate in the absence of an active leader. However, in an inter-dependent group, all the members have developed leadership qualities that ensure the sustainability of the group in an adverse situation.

Sustainability of groups has been a concern in development programs based on group approach. Groups are formed with much enthusiasm, but may wither away in due course without accomplishing their tasks. Thus, many resource are wasted in the mobilization of groups. The findings of this study suggest that if the group empowers its members, there is a possibility that the group can be a sustaining group. Therefore, for the sustainability of groups it is important to empower the members.

Conclusion # 3

Group members who perceive themselves as more self-directed tend to perceive their group as more empowering.

This finding reflects members' individual perceptions about group empowerment and their own self-directedness.

This finding indicates that an empowered group can be formed by developing skills and abilities among the members toward self-directed learning. Self-directed learning is not only a possession of skills or competencies, but it also constitutes the personality attributes of learners as explicated by the personality perspective of self-directed learning. The personality perspective of self-directed learning focuses on an individual's motivation to purse learning throughout life, rather than on the ability of an individual to engage in the episodes of self-instruction (Oddi, 1987). Oddi further asserts that the focus of self-directed learning should be on the study of the motivational, cognitive, and affective characteristics or personalities of learners. Brookfield (1986) stresses that self-directed learning can be facilitated. Therefore, it is important for a group facilitator to take into account the motivation of group members to engage in group activities, their learning styles, and psychological attributes, along with the enhancement of competencies to be self-directed learners.

By facilitating self-directed learning, a group's empowerment process will be enhanced. This will, in turn, further bolster self-directed learning. Thus, there will be

a spiralling-type group development and a dynamic group will be formed.

Conclusion # 4

Findings of this study show that there is a variation in the perception of group members regarding group empowerment and individual self-directed learning. Some view the group as more empowering while others see it as less empowering. Likewise, some members perceive themselves as more self-directed while some do not feel that they have the ability and skills to be self-directed learners.

This indicates a differential impact of group on individual growth and development. Berne (1963) hypothesizes that each member has a different mental picture of the group, based on his/ her personal feelings. This leads to a perceptual variation among members. The variation in perceptions instigates an individual to behave differently. This finding, thus, suggests that the group should not be considered a homogenous conglomeration of individuals. For example, members may be in different hierarchies of needs fulfillment. Cartwright and Zander (1960) state that individuals join groups to fulfill their certain needs such as needs for autonomy, recognition, fair evaluations and the like. They further assert that the more it appears to the individual that he/she may obtain prestige within a group, the more he/she will be attracted to the

group. Since individuals are guided by different needs and group cannot satisfy all the varying needs of the individuals, the individuals in the group will be in different stages of need satisfaction. It will again lead to a perceptual variation. Therefore, it is important for the group facilitator to understand the unique differences of the group's members.

Conclusion # 5

Findings of this study show that members with longer group membership see their group as empowering and see themselves as self-directed. Based on this finding, it can be concluded that if the group is empowering, it can possibly hold members for a longer period of time. At the same time, self-directed members stay longer in the group.

It is important for a group to have members having longer periods of involvement in group activities. If the member turnover is high, then the movement of the group toward maturity will be slow or even stagnated. The forces restraining the growth and development of the group might prevail over the forces that enhance the development of the group, because newer members are characterized by having self-oriented behavior, anxiety, and high dependency on the leader. There is no emergence of solutions, insight, sharing and disclosure (Tuckman (1965). In contrast to immature groups, the groups which hold members for a longer

period of time are characterized by high level of interaction and interdependence. When the groups are interactive and interdependent, their stability and viability can be ensured. Therefore, in order to maintain stability, viability, and effectiveness of groups, it is important for when the group to be effective, it is important for the group to empower its member and to facilitate self-directed learning. Members may drop-out if they feel that the group is not empowering.

Conclusion # 6

Findings revealed that age, gender and level of education are not related to perceptions of group empowerment or individual self-directedness. With regards to the relationship between level of education and self-directed learning, this study contradicts the Brockett study (1985). Brockett reports that a significant positive relationship exists between previous formal education and current readiness for self-directed learning. However, he recognizes the limitations of his study as homogeneity of the sample in terms of previous education. The sample of the present study is heterogenous in terms of levels of education. This could be one of the possible reasons for the contradiction. This study corroborates the findings of Brockett's study (1985) that chronological age does not appear to be linked with self-directedness.

The development programs are sometimes implemented through different groups like women's groups, youth groups, elderly groups, etc, on the assumption that heterogeneity in a group will inhibit the growth of its members. This study indicates that it is not necessary to segregate the groups on the basis of age, gender or education to enhance individual growth and development. However, there are other socio-cultural, socio-economic, and socio-political aspects which have profound impact on group growth. Therefore, this conclusion should be cautiously interpreted to imply only to the variables studied.

Implications

Based on the findings and conclusions of this study, the following implications have been drawn:

Implication # 1

Since groups are different in terms of empowerment and self-directed learning, they should be treated differently. This implies designing or implementing development programs involving groups. As a facilitator of the group, a development worker or educator should be able to assess the group in terms of group empowerment processes and abilities and skills for self-directedness. If the group has a low level of empowerment, program strategies should be designed to maximize the interaction of the members within the group.

The members from the group with higher levels of empowerment can initiate interaction themselves in formal or informal settings.

Implication # 2

Since there is a relationship between group empowerment and self-directed learning, it may be possible to effect one through the manipulation of the other. All ten indicators of group empowerment are positively related to self-directed learning. By manipulating any of these indicators, it may be possible to effect self-directed learning. Likewise, there are twelve indicators of self-directed learning positively related to group empowerment. Thus, by enhancing or impeding the development of skills and abilities leading to self-directed leaning, group empowerment could be affected.

Implication # 3

The way content focus of a group is dealt with can effect the degree of empowerment or self-directed learning. The focus of a group's activity may be simply transmission of information, or it may be development. If the focus is merely a transmission of information, the level of group empowerment or individual self-directedness may be low. Conversely, if the focus is developmental it may be possible

to induce higher levels of group empowerment or individual self-directed learning.

Recommendations

This section presents recommendations for future research. These recommendations are expounded upon as implied by the study.

Recommendation # 1

A longitudinal study of similar nature can be helpful in establishing the causal relationship between group empowerment and self-directed learning. This study has examined the groups at one point in time. And this does not establish the causal relationship. However, the findings of this study suggest that there could be a causal relationship between group empowerment and self-directed learning. A longitudinal study, therefore, will help to understand possible causal relationships between these variables.

Recommendation # 2

A similar study employing the combination of data collection techniques such as observation, personal interview, peer rating, expert rating or group discussion etc. can be supplemented with a self-administered mailed questionnaire. This study adopted only a self-administered mailed questionnaire. Although this is the most widely used

method of data collection in the social sciences, the self-report may reveal a lack of clear introspection and the judgements may not reflect an individual's behavior. Furthermore, this method does not allow further probing to have a clear understanding of the phenomenon. Therefore, a combination of data collection techniques will allow for the answering of many questions that are not addressed *a priori*.

Recommendation # 3

In order to have an indepth understanding of the phenomenon, a study comprising of failed groups would be helpful. Some groups are formed but disintegrate without accomplishing the set goals. It is important to understand why the groups have failed. This study suggests that the empowering groups hold members for a longer time. Also, self-directed members stay longer in the group. Thus, by comparing failed groups and successful groups, it may be possible to see if empowerment and self- directed learning aspects have any relationship with failure.

Recommendation # 4

This study focuses on groups that are aligned with government supported programs and initiated by government agencies. Government policies might influence the *modus operandi* of these groups. Therefore, a study involving groups aligned with non-governmental organizations or people

initiated groups could be helpful for understanding whether empowerment and self-directed learning have any relationship with the affiliation and initiation of groups.

Recommendation # 5

A similar study can be conducted taking social class, wealth, and cultural aspects into consideration to see whether these variables have any relationship with empowerment and self-directed learning. Socio-economic and cultural factors play important roles in establishing values and determining behavioral pattern. Therefore, in replicating this study in cross-cultural settings, it is recommended that socio-economic and cultural aspects of the society should be taken into account.

Recommendation # 6

Individuals may be members of different groups simultaneously. It may be possible for member to feel empowered in one group while not empowered in another group. At the same time, an individual may feel confident performing one task while may be dependent on others to perform another task. Therefore, a study to account for self-directedness in a multi-group membership situation could be conducted.

Recommendation # 7

Organizations could be examined using the same methodology as the groups. Organizations are characterized by defined lines of command and criteria for recruiting members. Empowering organizations may possibly be more effective in accomplishing their objectives because members of such organizations have intrinsic motivation for being independent. Therefore, in order to have a better understanding of the relationship between empowerment processes in the organization and organizational effectiveness, the methodology of this study could be adopted.

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Appendix A

Group Process Opinionaire

Direction

Answer each question based on your experience **as a member of the County Farm Bureau Board.** Questions in part I can be answered by circling the item that best describes your opinion. Some questions in part II can be answered by checking the category that best describes your situation, while some require a written response.

Example: 1

Statements	Strongly Disagree 1 2 3 4 5 Strongly Agree
I feel proud to be the part of this group	1 2 3 4 5

Example 2. Which of the following categories best describes your residence status?

[ ] urban
[ ] suburban
[ ] rural

Example 3. How long have your been residing in this county?
____yrs_____months

Part I

Please indicate your opinion for each statement in terms of how much you agree or disagree with the statement. **Consider the groups in terms of County Farm Bureau Board.** Circle a number from 1 to 5 on the scale to the right of each statement.

Statements	Strongly Disagree 1 2 3 4 5 Strongly Agree
1. Decisions in this group are influenced by all members.	1 2 3 4 5
2. My participation in this group has helped me to more **realistically diagnose** my own learning needs.	1 2 3 4 5
3. Members in this group are encouraged to reflect on the group's activities.	1 2 3 4 5
4. My participation in this group has assisted me in **relating to others** who may be able to help me learn new things.	1 2 3 4 5
5. Working together is important in this group.	1 2 3 4 5
6. Members of this group show a willingness to learn from each other.	1 2 3 4 5
7. My participation in this group has helped me to take the **initiative to use available resources** that may help me learn new things.	1 2 3 4 5
8. An important characteristic of this group is trust.	1 2 3 4 5
9. Members of this group are encouraged to become involved in the work of the group.	1 2 3 4 5
10. My participation in this group has increased my ability to **identify what I need to know.**	1 2 3 4 5
11. Reflection is an important activity in this group.	1 2 3 4 5
12. This group values ideas from members who have had extensive experience.	1 2 3 4 5
13. Members in this group support each other.	1 2 3 4 5
14. My participation in this group has provided me the ability to **identify resources** that may help me learn new things.	1 2 3 4 5
15. Members of this group seem to enjoy working with each other.	1 2 3 4 5
16. Trust is very important in this group.	1 2 3 4 5
17. My participation in this group has provided me the ability to **actually put to use new ways** for me to learn.	1 2 3 4 5

Statements	Strongly Disagree 1	2	3	4	Strongly Agree 5
18. Mutual support among members is important in this group.	1	2	3	4	5
19. There is opportunity for members of this group to influence decisions.	1	2	3	4	5
20. In this group members like to learn from each other.	1	2	3	4	5
21. My participation in this group has provided me the ability to draw knowledge and skill from the resources around me.	1	2	3	4	5
22. Being a facilitator is important for the leader of this group.	1	2	3	4	5
23. The experience of the group members is important for the operation of the group.	1	2	3	4	5
24. My participation in this group has helped me to select the best ways to learn.	1	2	3	4	5
25. My participation in this group has given me insight into how to relate to others in a collaborative way to help with my learning.	1	2	3	4	5
26. Involvement of the members is important for this group.	1	2	3	4	5
27. My participation in this group has helped me become more effective in dealing with personal issues that may block my learning.	1	2	3	4	5
28. Individual differences are valued in this group.	1	2	3	4	5
29. My participation in this group has renewed my desire to learn.	1	2	3	4	5
30. The leader of this group works hard to be a facilitator.	1	2	3	4	5
31. My participation in this group has provided me ability to evaluate my own learning.	1	2	3	4	5
32. Recognition of individual differences is a characteristic of this group.	1	2	3	4	5

Please turn over

Part II

1. How many members are in your group?_____

2. How long has your group been functioning?_____yrs_____months

3. How long have you been a member of this group?_____yrs_____months

4. How often does your group meet (weekly?, monthly?, etc.) _____

5. Which of the following best describes your educational background?

   [ ] Less than high school degree
   [ ] High school degree
   [ ] Some college
   [ ] College degree
   [ ] Graduate study
   [ ] Graduate degree

6. What is your age? _____

7. What is your gender?

   [ ] Male
   [ ] Female

Thanks for your participation

Please return your completed questionnaire in the enclosed envelope to:

Mr. Padma Singh
410 Agriculture Hall
Michigan State University
East Lansing, MI 48824-1038

APPENDIX B

Cover Letter

Date:

Name/Address of respondent

Dear (first name of respondent):

I am a doctoral candidate in Agricultural and Extension Education at Michigan State University. Currently, I am conducting research as part of my degree requirements. This research focusses on the group process- especially as it relates to helping the members learn. The results of this study should provide new insight into how to improve the group process.

The County Farm Bureau Boards have been selected as some of the groups that will be examined and your name was identified as a member of that group. I hope that it will be possible for you to participate in this study.

Enclosed is a short questionnaire that I hope you will complete and return to me in the enclosed stamped envelope. It should take no more than 10 minutes to complete.

You may be assured of complete confidentiality. Your participation in this study is voluntary and you are under no pressure to complete the questionnaire. You indicate your voluntary agreement to participate by completing and returning this questionnaire. You will notice that the question does not require you to provide your name (or other identifier) and no attempt will be made to identify specific respondents. The number with the questionnaire is for the mailing purpose only. All information collected from this questionnaire will be analyzed and presented as aggregated scores.

I hope it will be possible for you to participate in this study by completing the questionnaire. I will appreciate if you can return the questionnaire by **March 22**. I thank you in advance for your time and cooperation.

If you have any questions please feel free to contact me at (517) 355-6580.

Sincerely,

Padma Singh

APPENDIX C

Letter from MFB Regional Representative

MICHIGAN FARM BUREAU

7373 West Saginaw Highway, Box 30960, Lansing, Michigan 48909-8460
Phone (517) 323-7000

March 1, 1993

TO: County Farm Bureau Directors

FROM: Rob Anderson, Regional Representative

RE: Enclosed Questionnaire

I was recently contacted by Mr. Padma Singh, who is pursuing a doctoral degree at Michigan State, about the groups and leadership that exist in Farm Bureau. Through our discussions, he expressed a desire to gather some information from the leadership of the county Farm Bureaus in the Central Region.

Please take a couple of minutes to complete the enclosed questionnaire for Mr. Singh and return it in a timely fashion. I am confident that the data he collects from our group will be very helpful when you consider the type of leadership that is developed through our organization.

Thank you for your help!

APPENDIX D

Letter from Cooperative Extension Director

MICHIGAN STATE
UNIVERSITY
EXTENSION

March 16, 1993

Dear Friend:

You will soon be receiving a questionnaire from Padma Singh, a Ph.D. candidate in the Department of Agricultural and Extension Education at Michigan State University.

Padma is doing research on how groups in support of agriculture and extension education empower individuals.

Please take some time to complete Padma's research questionnaire. His findings will add to the knowledge base for providing quality Extension education programs.

If you have any questions, please call me at 517-788-4292.

Sincerely,

Les H. Schick
County Extension Director

lhs/jcq

JACKSON
COUNTY
Cooperative
Extension Service
412 Erie Street
Jackson, Michigan
49202-2296

APPENDIX E

Reminder Letter

Date:

Name/Address of respondent

Dear(first name of respondent)

Two weeks ago, a questionnaire seeking your opinion about the group process was mailed to you. You were selected to participate in the study because of your knowledge and experience as a member of Farm Bureau County Board.

If you have already completed and returned the questionnaire, please accept my sincere thanks. In the event the questionnaire was misplaced or you have had no time to respond, I have enclosed another questionnaire. Please take a few minutes and return the questionnaire as soon as possible. Your participation is essential for the successful completion of the study and I am counting on your support. Thank you.

Sincerely,

Padma Singh

APPENDIX F

Approval letter from University's Committee on Research Involving Human Subjects

OFFICE OF VICE PRESIDENT FOR RESEARCH
AND DEAN OF THE GRADUATE SCHOOL

EAST LANSING • MICHIGAN • 48824-1046

February 12, 1993

TO: Mr. Padma Singh
410 Agriculture Hall

RE:	IRB #:	93-041
	TITLE:	THE RELATIONSHIP BETWEEN INDIVIDUAL EMPOWERMENT AND SELF-DIRECTED LEARNING IN SELECTED MICHIGAN SMALL GROUPS
	REVISION REQUESTED:	N/A
	CATEGORY:	1-C
	APPROVAL DATE:	02/12/1993

The University Committee on Research Involving Human Subjects' (UCRIHS) review of this project is complete. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCRIHS approved this project including any revision listed above.

UCRIHS approval is valid for one calendar year, beginning with the approval date shown above. Investigators planning to continue a project beyond one year must seek updated certification. Request for renewed approval must be accompanied by all four of the following mandatory assurances.

1. The human subjects protocol is the same as in previous studies.
2. There have been no ill effects suffered by the subjects due to their participation in the study.
3. There have been no complaints by the subjects or their representatives related to their participation in the study.
4. There has not been a change in the research environment nor new information which would indicate greater risk to human subjects than that assumed when the protocol was initially reviewed and approved.

There is a maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for complete review.

UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. Investigators must notify UCRIHS promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

If we can be of any future help, please do not hesitate to contact us at (517) 355-2180 or FAX (517) 336-1171.

Sincerely,

David E. Wright, Ph.D.
UCRIHS Chair

APPENDIX G

Item-total Correlation Coefficients for Empowerment Items

ITEM-TOTAL STATISTICS

	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
EDI	74.8101	153.3866	.6727	.6362	.9361
EDII	74.6456	156.2830	.6412	.6121	.9367
ERI	74.7975	154.2918	.6684	.7145	.9362
ERII	75.3291	158.5570	.4956	.4513	.9391
ECI	74.4810	155.9451	.5968	.6052	.9374
ECII	74.8354	153.3700	.6646	.6374	.9362
EWI	74.9367	152.7524	.6888	.7134	.9358
EWII	75.1013	151.5024	.7807	.7513	.9342
ENI	75.0127	154.0127	.6867	.8137	.9359
ENII	74.9114	152.9792	.7283	.8581	.9351
EVI	74.5570	152.6345	.7153	.7710	.9353
EVII	74.4430	157.8909	.5973	.6876	.9374
EEI	74.6962	151.0347	.7214	.6520	.9352
EEII	74.6962	158.0860	.5131	.6363	.9388
EFI	75.2875	148.8403	.7810	.7069	.9374
EFII	75.5375	155.5429	.5010	.4798	.9424
ELI	75.0500	155.8709	.5488	.6830	.9414
ELII	75.300	156.5771	.4973	.4513	.9422
EMI	75.3500	150.0785	.7882	.7281	.9374
EMII	75.1750	156.0703	.5569	.7003	.9412

RELIABILITY COEFFICIENTS 20 ITEMS

ALPHA = .9397 STANDARDIZED ITEM ALPHA = .9395

Key to the code:

EDI = Item # 1 in questionnaire
EDII = Item # 18
ERI = Item # 3
ERII = Item #11
ECI = Item # 5
ECII = Item # 15
EWI = Item # 6
EWII = Item # 20
ENI = Item # 8
ENII = Item # 20
EVI = Item # 9
EVII = Item # 26
EEI = Item # 12
EEII = Item # 23
EFI = Item # 28
EFII = Item # 32
ELI = Item #22
ELII = Item # 30
EMI = Item # 13
EMII = Item # 18

APPENDIX H

Item-total Correlation Coefficients for SDL Items

ITEM-TOTAL STATISTICS

	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
SDLD	39.2500	85.7342	.7406	.6335	.9558
SDLR	38.9000	84.6734	.7908	.7565	.9543
SDLI	9.0375	86.6948	.7794	.7022	.9546
SDLN	39.0500	86.2253	.7820	.6795	.9545
SDLA	38.9750	86.9867	.7606	.7932	.9551
SDLU	39.2000	83.1747	.8820	.8179	.9514
SDLK	38.9000	84.4962	.8435	.8181	.9527
SDLS	39.3750	85.9842	.7808	.6982	.9545
SDLC	39.0125	84.7720	.8156	.7061	.9535
SDLP	39.5125	85.8226	.7882	.7224	.9543
SDLREN	39.2250	84.7082	.7964	.7709	.9541
SDLE	39.1250	87.9335	.7312	.6109	.9560

RELIABILITY COEFFICIENTS 12 ITEMS

ALPHA = .9579 STANDARDIZED ITEM ALPHA = .9579

Key to the code:

SDLD = Item # 2 in questionnaire
SDLR = Item # 4
SDLI = Item # 7
SDLN = Item # 10
SDLA = Item # 14
SDLU = Item # 17
SDLK = Item # 21
SDLS = item # 24
SDLC = Item # 25
SDLP = Item # 27
SDLREN = Item # 29
SDLE = Item # 31

APPENDIX I

Correlation between Empowerment Items and SDL Items

Correlations:	SDLD	SDLR	SDLI	SDLN	SDLA	SDLU
EDI	.3423**	.3288*	.2961*	.4345**	.2178	.4651**
EDII	.3097*	.5235**	.3462**	.4630**	.4404**	.4168**
ERI	.3772**	.4302**	.3278*	.4040**	.3596**	.3916**
ERII	.2027	.2440	.1426	.2051	.1323	.3283*
ECI	.3861**	.5226**	.2916*	.4668**	.3062*	.3730**
ECII	.3010*	.4179**	.2698*	.3786**	.2410	.3443**
EWI	.4195**	.3308*	.2809*	.3333*	.2227	.3370*
EWII	.4459**	.4291**	.3675**	.3948**	.2760*	.4879**
ENI	.3932**	.2787*	.1833	.3420**	.0804	.4005**
ENII	.3639**	.3177*	.1208	.3763**	.0884	.4305**
EVI	.2922*	.5711**	.2576	.5126**	.4272**	.4075**
EVII	.4655**	.4606**	.2799*	.4868**	.2732*	.4368**
EEI	.2731*	.4779**	.2836*	.4365**	.3032*	.3912**
EEII	.4382**	.4381**	.3870**	.3983**	.4321**	.4925**
EFI	.4389**	.4468**	.2076	.4847**	.3428**	.5742**
EFII	.2060	.1617	.1901	.3176*	.1745	.2728*
ELI	.3262*	.5275**	.3988**	.3947**	.4629**	.4930**
ELII	.1975	.2161	.1065	.3512**	.1456	.3746**
EMI	.3451**	.3559**	.2504	.2560	.2510	.4342**
EMII	.2656*	.4018**	.2273	.3574**	.2431	.3854**

	SDLK	SDLS	SDLC	SDLP	SDLREN	SDLE
EDI	.3662**	.3597**	.2602*	.3511**	.2650*	.2334
EDII	.4498**	.3626**	.2940*	.4400**	.2860*	.3702**
ERI	.3528**	.3883**	.2695*	.3557**	.2023	.2324
ERII	.3027*	.4444**	.2705*	.2426	.2474	.1520
ECI	.3086*	.3646**	.4046**	.3481**	.3130*	.3114*
ECII	.3714**	.3662**	.2651*	.3273*	.2632*	.2648*
EWI	.2519	.4045**	.3368*	.4707**	.3592**	.2527
EWII	.4400**	.5395**	.4898**	.5135**	.4612**	.4298**
ENI	.2501	.4460**	.2838*	.3543**	.3217*	.3459**
ENII	.2804*	.3715**	.2345	.3499**	.3423**	.3604**
EVI	.4544**	.3372*	.2671*	.2930*	.1616	.3218*
EVII	.3816**	.3187*	.3015*	.3180*	.3890**	.3947**
EEI	.3746**	.2767*	.2012	.2849*	.2166	.1677
EEII	.4986**	.4328**	.3662**	.3385*	.4244**	.4188**
EFI	.4219**	.4738**	.3791**	.5866**	.4367**	.4754**
EFII	.3293*	.4501**	.2251	.2835*	.3087*	.3493**
ELI	.5742**	5494**	.4699**	.4849**	.4374**	.4484**
ELII	.3363*	.3884**	.1823	.3300*	.3387*	.2951*
EMI	.3409**	.813**	.3472**	.4176**	.3263*	.3022*
EMII	.2879*	.2612*	.2593	.3238*	.2633*	.2576

N of cases: 80 1-tailed Signif: * - .01 ** - .001