

GROUP MECHANISMS AND GROUP COHESION: AN EXAMINATION OF THE
EFFECTS OF GROUP PROPERTIES ON COHESIVENESS

by

Susan Smith Twaddle

Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

Sociology

APPROVED:

George A. Hillery, Jr., Chair

Charles J. Dudley

John N. Edwards

Ellsworth Fuhrman

James K. Skipper, Jr.

August, 1982

Blacksburg, Virginia

ACKNOWLEDGEMENTS

At no time during the research process was I more aware than now of the inadequacy of both my ability and of the language to express the meaning of sentiment. To those who shared their professional expertise, and to those who cheered me on from the sidelines, I wish to express my deep appreciation. I trust you to know what I find impossible to express.

To my mentor and Chairman, Dr. George A. Hillery, whose passion for scholarship dares him to explore the unconventional, thank you for your example.

To the members of my committee, Drs. John N. Edwards, Ellsworth Fuhrman, Charles J. Dudley, and James K. Skipper, Jr., thank you for the prestige your reputations gave my committee. Your approval is a compliment.

To Drs. Alan Acock and Theodore Fuller, thank you for keeping your office doors open to me. Without your counsel and expertise I would still be groping.

To Jerri Bullard, Jim Hughes, Ken Perkins, Alan Stump, and Wen Shan Yang, thank you for being my friends.

And to my husband, Bob, thank you for allowing me the freedom to discover the drawbacks of independence.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	vi
LIST OF FIGURES	vii
 CHAPTER	
I. INTRODUCTION	1
Statement of the Problem	1
II. COMMUNITY SENTIMENT	6
Introduction	6
Community as Communal Organizations	8
Community as Sentiment: The Literature	12
Discussion	22
Summary	31
III. COHESION	34
Definition and Theoretical Underpinnings	34
Cohesion as a Measure of Sentiment	44
Kanter's Commitment Mechanisms Model	48
Summary	64
IV. METHODOLOGICAL PROCEDURES	66
Introduction	66
The Sample	66
Sources of Data	67
Judge Reliability	71
Measurement and Scale Development	73
The Dependent Variable	75
The Independent Variables	79
Data Analytic Techniques	89
V. PRESENTATION OF FINDINGS	93
Introduction	93
Building the Model	94
Testing Model I	98
Testing Model II	100
Summary	106

VI.	INTERPRETATION OF FINDINGS.	108
	Introduction.	108
	Kanter's Conceptual Model	108
	The Mechanisms and Cohesion	111
	Type of Organization, Sacrifice, and Cohesion	114
VII.	ISSUES AND CONCLUSIONS.	121
	Introduction.	121
	Problems Encountered in Data Analysis	122
	Issues.	126
	REFERENCES.	132
	APPENDIX A	139
	VITA.	144
	ABSTRACT	

LIST OF TABLES

Table	Page
1. Typology of Human Groups	10
2. Summary of Kanter's Commitment Mechanisms Model.	51
3. Groups in the Research Sample.	68
4. Summary of Judge Panels.	72
5. Summary of Variable Data Source, Measurement and Reliability	77
6. Summary of Variable Statistics	90
7. Zero-Order Correlations and Significance Levels	95
8. Zero-Order Correlations and Significance for Type of Organization, Sacrifice, and Cohesion.	101

LIST OF FIGURES

Figure	Page
1. Cartwright's Scheme for Analyzing Cohesion.	43
2. Plot of Regression Lines for Cohesion on Sacrifice by Type of Organization	104

Chapter I

INTRODUCTION

Statement of the Problem

The concept cohesion is a term not unfamiliar to the student of groups. Although the nature of cohesion has been of theoretical interest to scholars ever since the formal study of society began, an intense interest in cohesion as a variable subjected to empirical investigation developed in the 1940s and continued into the late 1950s when research on this topic was at its peak. As a variable which has been manipulated experimentally in laboratory settings, contemporary researchers have studied cohesion as both an independent variable which affects behavior and as a dependent variable in which attempts have been made to determine what produces it.

The significance of cohesion as a critical area of investigation in the analysis of groups can be stated quite simply. First, cohesion is a necessary condition for group formation since at least a minimum amount of cohesion is required in order for members to remain attracted to one another long enough for the group to develop its social organization. Secondly, to the extent this minimum requirement is exceeded, the greater the likelihood that cohesion will develop other aspects of group dynamics which feed back

into it (Shaw, 1971: 193-194). Thus, research which adds to our knowledge of cohesion adds to our knowledge of groups in general.

The investigation of cohesion as a dependent variable is certainly nothing new to the discipline. However, research on the nature of cohesion was in its heyday during the 1940s and 1950s, an era which did not have benefit of sophisticated computer facilities and robust statistical techniques. As such, research on cohesion was restricted to either laboratory experiments on a small number of groups or to bivariate survey research conducted in natural settings where several groups of one type (work groups) were investigated. Due to the nature of those research designs, only a few variables and a restricted number of types of groups were examined. The present research involved the investigation of the effects of several independent variables on cohesion and utilized a sample which consisted of thirty groups of varying types.

This research project was designed with two related purposes in mind. One purpose was to investigate the effects of a number of independent variables derived from the work of Rosabeth Moss Kanter (1972) on cohesion. The research interest was to examine the contribution of these

independent variables in explaining variance in group cohesion. This constituted the first model tested in the study.

On the basis of the results of the analysis of the first model, a second model was tested in which the variables from Model I in conjunction with an additional independent variable, type of organization, was tested. Regarding the significance of the analysis of the second model, Hillery (1972) has criticized the field of community theory by stating that there has been a confusion between community as a sentiment and community as a human group. Using cohesion as a measure of sentiment, and defining community as communal organizations, the second purpose of this research was to examine the nature of the relationship between type of organization and cohesion.

To briefly outline the plan of this project, Chapter Two addresses three major themes. First of all, an introduction to the problem and the definition of community as it is used in this research are presented. Secondly, there is an examination of the literature to illustrate the roots of the assumption that sentiment is a quality of community. Finally, empirical findings from the literature on social participation are presented which suggest the need to subject the assumption to empirical investigation, concluding

with the presentation of an alternative scheme for distinguishing community from sentiment.

Chapter Three contains three major themes. First of all, the definition of cohesion and its theoretical underpinnings are presented. From this, the discussion turns to Homans' (1950) concept of sentiment and the use of cohesion as a measure of sentiment. In the interest of clarity, for the present suffice it to say that both sentiment and cohesion involve attraction to the group and a desire to remain which result from the interaction of members' motives and group properties. In addition, the consequences of both sentiment and cohesion are the same: interpersonal liking, consensus, and social control. In the final section of Chapter Three, Kanter's Commitment Mechanisms Model from which the variables for Models I and II were derived is presented. The consequences of these commitment mechanisms are aspects of cohesion.

Chapter Four deals with the methodological procedures employed in this research and includes a description of the sample, data collection techniques, survey instrument, and the statistical techniques for analyzing the data.

Chapters Five and Six present the study findings and interpretation of these within the context of theory, res-

pectively, while Chapter Seven discusses the study findings within the framework of broader issues within the discipline. Specifically, Chapter Seven presents a discussion of some of the problems encountered in the research.

Chapter II
COMMUNITY SENTIMENT

Introduction

Every area of science must contend with the problem of jargon and technical language utilized for the advancement of clarity, classification, and conceptualization of various phenomenon. Lack of distinction can result in confusion, misunderstanding, and the tendency for scientists to talk past one another. The consequences of vague, multi-phenomena concepts can and do stagnate the progress of science. As Hillery (1955: 111) pointed out:

To the extent that the degree of consensus is in doubt, to that extent must one remain uncertain whether different things are being described or whether the same thing is being viewed from different vantage points.

The confusion in the field of community theory is the consequence of one such problem: the term community means many things to many people.¹ Strictly speaking, there is not total agreement as to what constitutes community. In his analysis of ninety-four definitions of community delineated from the literature, Hillery (1955) abstracted sixteen concepts with only one, community involves people, common to

¹For example, Effrat (1974) delineated four major research traditions within the field of community which have investigated such phenomena as small towns, villages, cities, neighborhoods, urban subareas, minority groups, interest groups, communal institutions, voluntary associations, social areas, and social networks.

all but three definitions. Obviously, it can be argued that people, in and of themselves, are not a distinguishing characteristic of community since this element applies to all human groups. Yet, if the most common element in definitions of community is not a characteristic which differentiates community from other types of organization, the question arises, what is?

Of the ninety-four definitions Hillery (1955) examined, fifty-eight (nearly 62 percent) included ideas which centered around at least one of the following elements: common life, consciousness of kind, and possession of common ends, norms, and means. Inherent in these definitions is the notion that homogeneity produces consensus, social control, and, by extension, relationships which are characterized by a high degree of sentiment: feelings of closeness, sense of belonging, and attraction. To put it another way, because there is an affective quality in this type of relationship, it is more cohesive. In addition, not only does the literature imply that community is associated with emotional attachments, but, frequently, when these are viewed as lacking, there has been a strong tendency to conclude that it is in an aberrant state. Thus, we hear such phrases as loss of community, eclipse of community, or pseudo-community, and view the members of such systems as alienated, segmented, and isolated.

Community as Communal Organizations

In order to avoid the criticism that it is incorrect to assume the meaning of community is understood, it is imperative at the outset to state how the term is defined in this research. Hillery (1968: 151) has criticized the use of the term by stating:

'Community' has been used in so many contradictory ways as to render it almost useless for describing a specific system.

Due to the confusion which has been generated by the use of the term, Hillery (1968) developed the concept communal organizations which are defined as "heavily institutionalized systems which lack defining goals" (1968: 189). For Hillery, communal organizations are a type of social system within a general typology of human groups which can be distinguished from other types of social organization based on whether or not there is primacy given to specific goals, degree of institutionalization, and degree of inclusiveness (1968: 142-152).

Following Parsons' definition of specific goal, Hillery distinguished formal from communal organizations on the basis of whether or not the organization gives primacy to specific goals. Hillery (1968: 146-147) stated:

we may describe a specific goal as having at least three characteristics: (1) the product of the goal is identifiable, such as automobiles, academic degrees, etc; (2) the product can be used by

another system -- that is, the output of one system is an input for another system; and (3) the output is amenable to contract, it can be bought and sold. An organization has specific goals if its members recognize the possession of specific goals and its norms are so organized that they contribute to the attainment of those goals.

Degrees of institutionalization and inclusiveness were also used in Hillery's typology of human groups. The degree of institutionalization was employed to make the distinction between an organization and a group and was "intended merely to emphasize the greater complexity in organizations" (1968: 151). The third element, degree of inclusiveness, was used to illustrate that one type of system can be found in other types of systems within the same general category.

Thus, nations include vills which include neighborhoods, but not vice versa (at least normally). Similarly ethnic groups may include cliques, but not vice versa, and social movements may include crowds, but not vice versa (1968: 149).

These three principles, primacy given to specific goals, degree of institutionalization, and degree of inclusiveness, resulted in Hillery's (1968: 151) typology of human groups presented in Table 1.

Community as it will be used in this research consists of those organizations which are classified under the category of communal organizations. These are highly institutionalized organizations which may have specific goals, but these organizations do not give primacy to them; that is,

TABLE 1
 TYPOLOGY OF
 HUMAN GROUPS

Institutionalization	Primacy to Specific Goal		Inclusiveness
	yes	no	
Highly	Formal Commonwealth Organizations Service Organizations Business Concerns Mutual-benefit Associations	Communal Nations Villages Neighborhoods Families	Maximum Minimum
	Expressive Social Movements	Informal Ethnic Groups Cliques	Maximum Minimum

specific goals are not their reason for existence, as is the case with formal organizations.

The concept communal organizations is at the same time both general and specific in that while it encompasses several entities which have been called community, it also makes a distinction among them by specifying degree of inclusiveness and institutionalization. Thus, as indicated in Table 1, communal organizations include families, neighborhoods, vills (defined as "families cooperating in space," such as folk villages and cities), and nations. Not included in the table but also considered to be types of communal organizations are such groups as monasteries, communes, and Greek social organizations.

It is important to emphasize the inclusive nature of communal organizations since it will become clear in the following section that different writers have addressed different levels of communal organization. Some authors referred to community from the standpoint of vills and neighborhoods, while others wrote about community in terms of primary relations and, in many cases, in terms of the transition of society from primeval to modernity, or the rural-urban continuum. This is problematic in the sense that a great deal of confusion is generated, which was precisely Hillery's point when he wrote:

If there is to be any mcratorium in the field, it should be on the dilettante approach of writing an entire book about community without ever defining the concept (1972: 536).

However, the purpose of this chapter is not to analyze or to critique, but simply to give the reader a sense of the literature which reflects, sometimes only implicitly, the notion that sentiment is a quality of community and that when it is lacking it is considered to be in an aberrant state.

In addition, before addressing the literature, it is also important to point out that while the orientation of this research is to compare communal and formal organizations, the literature does not make the distinction between groups which are highly institutionalized (formal and communal) and those which are not (expressive and informal). Neither the classical literature nor contemporary research made the explicit distinction, but rather, each approached the subject under the general topic of primary and secondary modes of interaction.

Community as Sentiment: The Literature

The idea that community connects sentiment is reflected in literature which spans the historical development of sociology as a discipline from early classical writings to urban

studies between World Wars I and II in the Chicago School tradition to contemporary mass society theory. Since it is obvious that a presentation of all relevant literature would be a monumental task, only selected representative literature from each period will be presented.

Early Classical Literature. One of the most straightforward illustrations of a romanticized conceptualization of community as a sentiment is found in the work of Ferdinand Toennies (1957). The definitions and explicit value judgments associated with the concepts Gemeinschaft and Gesellschaft are best illustrated by Toennies when he wrote:

All intimate, private, and exclusive living together. . . is understood as life in Gemeinschaft (community). Gesellschaft (society) is public life -- it is the world itself. In Gemeinschaft with one's family one lives from birth on, bound to it in weal and woe. One goes into Gesellschaft as one goes into a strange country. A young man is warned against bad Gesellschaft, but the expression bad Gemeinschaft violates the meaning of the word. . . all praise of rural life has pointed out that Gemeinschaft among people is stronger there and more alive; it is the lasting and genuine form of living together. In contrast, Gesellschaft is transitory and superficial.

Toennies' theory of the development of Gemeinschaft demonstrates his view that sentiment, and the romantic notions associated with that term, are linked with community. According to Toennies, the bases of unity and the possibility of Gemeinschaft were kinsnip, propinquity, and

intellectual proximity which were the sources of understanding. The reciprocal relationships of kinship (blood), neighborhood (land), and town (friendship) promoted the development of consensus which became a binding sentiment. "It represents the special social forces and sympathy which keeps human beings together as members of a totality" (1957: 11). These allowed for the development of intimate knowledge of others, through reciprocal relations, which, in turn, facilitated understanding as a binding consensus and sentiment.

For Toennies, the *Gemeinschaft* of blood was the basic, primary unit of community since it denoted "unity of being." *Gemeinschaft* of blood developed and differentiated into *Gemeinschaft* of locality based on common habitat, and from that emerged the *Gemeinschaft* of mind which resulted in cooperation and coordinated action for common goals. *Gemeinschaft* of mind, which was indicative of mental life, was the pure, truly human form of community when it was found in combination with the others.

Clearly, Toennies' description of *Gemeinschaft* depicted his judgment that it was better than *Gesellschaft*. The terms "understanding," "consensus," "binding sentiment," "sympathy," to name a few, illustrate the point.

Although Simmel stated, "it is not our task either to accuse or pardon, only to understand" (1950a: 424), he had an ambivalent view of modern life. On the one hand, he saw the individual in the metropolis as free from domination of his total personality. On the other hand, there are examples in his writings which suggest that the price of increased freedom was a decrease in emotional attachments, sentiment, and meaning in life. In this connection, Simmel wrote:

The metropolis exacts from man as a discriminating creature a different amount of consciousness than does rural life. Here the rhythm of life and sensory mental imagery flows more slowly, more habitually, and more evenly. Precisely in this connection the sophisticated character of the metropolitan psychic life becomes understandable -- as over against small town life which rests more upon deeply felt and emotional relationships. . . . The metropolitan type of man -- which of course exists in a thousand individual variants -- develops an organ protecting him against the threatening currents and discrepancies of his external environment which would uproot him. He reacts with his head instead of his heart (1950a: 410).

Simmel maintained that the development of a biased mentality in the metropolis was the result of an increased numerical and spatial growth and increased division of labor in which the producer was severed from the product. Therefore, while the urbanite had a greater degree of individual freedom, he was surrounded by cultural objects which, while not completely meaningless, neither were they meaningful. The

urban milieu bred individuality by the very nature of heterogeneity. However, sentiments in the traditional sense were replaced by rationality; the objective spirit took precedence over the subjective spirit.

He becomes a single cog as ever against the overwhelming organization of things and forces which gradually take out of his hands everything connected with progress, spirituality, and value. The operation of these forces results in the transformation of . . . a subjective form into a purely objective existence (1971: 237).

According to Simmel, one major cause of the transformation from a subjective to objective spirit was the shift from a barter system to a monetary system. Money affected interaction since it was impersonal, limited relations to specific purposes, and reduced people and things to a common denominator.

Money is concerned only with what is common to all: it asks for the exchange value, it reduces all quality and individuality to the question: How much? . . . Only money economy has filled the days of so many people with weighing, calculating, with numerical determinations, with a reduction of qualitative values to quantitative ones (1950a: 411-412).

The Chicago School Tradition. The notion that size, density, and heterogeneity created a social structure which resulted in the replacement of primary contacts with secondary associations was a major theme in sociological writings between World Wars I and II. It was during this period that social disorganization theory developed.

Social disorganization theory viewed social pathologies as the consequences of a lack (or weakening) of primary ties which were viewed as the sources of custom, rules, authority, and social control. As Wirth (1940) pointed out, the term "disorganization" suggested there was some criterion for identifying a community which was organized. The criterion was public opinion, or, in other words, a consensus about values and norms.

Social disorganization theorists maintained that as society increased in size, density, and heterogeneity there was a corresponding breakdown of primary relations and traditional sources of values and social control. This produced crime, delinquency, mental illness, alcoholism, and other forms of deviant behavior which were viewed as symptoms of social disorganization. In other words, when primary ties, homogeneity, and consensus were lacking, the system was viewed as lacking organization; it was in a deviant form.

One of the clearest examples of the notion that the lack of primary ties, homogeneity, and traditional sources of authority produce disorganization is found in the work of Robert Redfield (1941). Redfield examined the societal progressive movement from folk to urban society by comparing four settlements in the Yucatan Peninsula at the same point

in time. His major conclusion was that the evolutionary process of society was depicted in the four communities with the most primitive societal form found at the periphery moving toward modernity the closer one approached the city. The gradient from Tusik (folk village) to Merida (city) was seen in a variety of interdependent factors which resulted in gradient degrees of cultural organization among the four communities: population composition, degree of division of labor, religion (sacred to secular), and familial to individual orientations. According to Redfield, homogeneity, a low degree of division of labor (based on agriculture), religion, and an emphasis on familial relations produced a very high degree of cultural organization in the folk villages, whereas the opposite of these (found in the city) produced a high degree of cultural disorganization.

Although both Catholicism and paganism were practiced in the folk villages, this duality did not produce a contradiction. In a reference to the design for living, Redfield wrote:

The relative scarcity of population, the great size of the trees of the forest, and the total absence of outside governmental regulation of land use and of commerce in lands . . . are circumstances tending to emphasize for the native the nearness and importance of the bush and to favor a mystical attitude toward it" (1941: 52).

Both Catholic and pagan rituals embodied a whole system of beliefs and customs and a distinction between them was almost nonexistent. In Tusik (folk village), the two bodies of rituals seemed to constitute a single cult, a single ceremony. As one moved away from the folk villages, pagan practices were known but "it is something uncanny, a little diabolic, carried on somewhere outside the city" (1941: 105).

In the folk villages, the high degree of cultural organization into which the complementary elements of Catholicism and paganism fit were described by Redfield as a "network" or "web." Although the members of the isolated communities recognized two hierarchies, Christian and pagan, these meshed and became congruent with nature. In Tusik, nature was seen as equivalent to the divine and, as such, the relationship between humans and nature (as gods) became a contract of sorts:

the milpero (farmer) respects the bush, making use of only so much as he needs and wasting none; in return the gods of the bush will refrain from deflecting the swung axe against the milpero's foot (1941: 115).

In this same vein, nature, as gods, was vitally important to these agriculturalists, according to Redfield, and assumed ultimate form in worship.

The transition of religion from the sacred to magical to secular from the folk village to the city resulted partly as a consequence of decreasing agricultural activity. Because of their dependence on agriculture for survival, the relationships found in the folk villages supported the idea that the individual "was less free to act independently of his family and settlement" (1941: 263), whereas in the city there was a high degree of independence from these.

In his conclusion, Redfield viewed the city as culturally disorganized as the result of conditions which severed the individual from sources of meaning and understanding. In his appraisal of Merida (the city) Redfield wrote:

people cease to believe because they cease to understand, and they cease to understand because they cease to do things that express the understanding (1941: 363).

Contemporary Literature. In writings after World War II, social scientists began to question the assumption that primary attachments were lacking in modern society. As Kornhauser (1968) pointed out,

this portrait of modern life was subject to considerable criticism on the grounds that primary relations are much in evidence in the factory, the army, and in other allegedly impersonal organizations (1968: 62).

However, Kornhauser has argued that "the problem of community is much more than the mere presence or absence of

personal attachments and communal bonds" (1968: 62). He maintained that the functions of primary groups have decreased, not that they are absent. That is, primary relations exist, but they play a decreasing role in organizing society because they no longer serve as "sources of meaning and support for the individual" (1968:62). For these reasons, Kornhauser and other mass society theorists maintain that the links among primary ties are weak.

Kornhauser stated that the isolation and weak links in primary relations have resulted in the need for "more inclusive bonds of solidarity" and "a search for new forms of community" (1968: 62). However, according to him, the organization of mass society obstructs its development and, therefore, there is a "heightened receptivity to the appeals of pseudo-community" (1968: 62). Examples of pseudo-community are the German Youth Movement at the turn of the century, the Nazi Movement, mass persuasion exploit themes, and human relations programs in industry.

According to Kornhauser, the ideologies and programs which develop in mass society to meet needs which are unfilled by weak, isolated primary relations are "pseudo-community" or "distorted forms and expressions of the search for community" (1968: 62). By inference, it seems that

Kornhauser views community as a type of relationship which provides meaning, support, and is the basis of solidarity. In other words, he equates community with sentiment, and because solidarity in modern society is not based on traditional primary relations, it is not community.

Discussion

The discussion up to this point has attempted to present examples from the literature to illustrate, either explicitly or implicitly, that modern life is viewed differently from life in a folk society; that the difference is the result of a lack, or at least a weakening of, primary ties. The folk-urban continuum, particularly in the writings prior to World War II, contained oversimplified ideas that inhabitants of folk societies were characterized by solidarity of beliefs, attitudes, and means and, therefore, had a high degree of cultural organization, while modern peoples, although freer, were viewed as sophisticated, individualistic, impersonal, and lacked primary attachments. Whether implicit or explicit, modern life has been stereotyped as superficial and disorganized.

Whatever qualities have been assigned to modern society, whether it be large, impersonal organization, rationality, heterogeneity, or lack of emotion, it was

assumed that these pertained to cities as a whole (Sennett, 1969: 12). The works of scholars of the early Chicago School, no doubt, viewed crime, delinquency, vice, and the emergence of ghettos as the opposite of that glorified rural domain.

As Palen (1975) has noted, it has been unfortunate that ideal types (Toennies' concepts of *Gemeinschaft* and *Gesellschaft*) are sometimes treated as if they really exist rather than what they truly are, theoretical formulations. But real life is far more complicated than ideal types suggest: "Real people rarely fall into neat all-or-nothing categories" (Palen, 1975: 116). However, even in cases where rural-urban ideal types were not utilized (Bedfield's study of Yucatan), there was a conspicuous lack of attention given to hunger, poverty, and disorganization of folk village life and to the organization of the city.

It has often been assumed that the seemingly detached attitude of the urban dweller is a consequence of his standard noninvolvement in the lives of others. However, as Palen stated,

city dwellers do not have colder personalities In fact, the coolness and even overt hostility of smalltowners to "outsiders" who act, dress, or think differently has long been a theme of American drama. . . . (1975: 117-118).

Both in the city and in rural areas, people respond to others who are familiar. Even though the potential of urban contacts and interaction may frequently be unfulfilled, nonetheless, urbanites, like rural people, chose neighbors who are like themselves. In this same vein, William Whyte (1943) in his study of an Italian ghetto in Boston emphasized the cultural homogeneity of that ethnic village and the maintenance of traditional lifestyles while located in an urban setting. Gans (1968) noted that within the city, whether in its core or at the outskirts, there are

relatively homogeneous groups, with social and cultural moorings that shield . . . [them] fairly effectively from the suggested consequences of number, density, and heterogeneity (1968: 36).

Studies in the area of social participation in modern life support the conclusion that primary group attachments are not as infrequent as it was once believed. For example, in his study of Detroit, Axelrod (1956) found that nearly two thirds of the population in that study got together with informal groups more than once a week. Tomeh (1967), in her study of Detroit, found that not only do contacts with relatives, friends, co-workers, and neighbors occur frequently, but that "the complete absence of informal contacts of one sort or another is extremely rare" (1967: 100). Bell and Boat (1957), in their study of San Francisco, report findings which conclude that informal relationships are fre-

quent. Kasarda (1974) found that population size and density did not significantly affect kinship or friendship bonds and that persons who resided in urban areas "have more extensive social ties than those residing in rural communities" (1974: 333). Also of interest was Kasarda's finding that, "rather than replacing primary contact, formal secondary ties foster greater numbers of local primary contacts" and that "increased population size and density does not significantly weaken local community sentiments" (1974: 336-338).

Yet, while research has borne out that primary contacts and communal bonds do exist in modern society, the reader will recall that Kornhauser asserted that "the problem of community is much more than the presence or absence of primary ties" (1968: 62). He maintained that these ties exist, but they are weak, isolated, and do not satisfy needs for solidarity and meaning. He defined community in terms of needs for solidarity, meaning, and support, and, apparently, because programs and ideologies in mass society "only simulate, but do not create community," they have failed; they are pseudo-community. Solidarity, meaning, and support as they have been used in connection with the term community connote strong emotional attachments. But are these an inherent quality of community?

Schmalenbach (1961) made a distinction between community and communion (attachments based on emotion). According to him, there has been an inclination to consider consciousness of kind at the root of feeling. The reason for confusing feeling with community is that it is erroneously believed that feelings are "'deeper' or 'nearer' the unconscious than rational thought" (1961: 335). For Schmalenbach, community does not consist of feelings, whereas communion does. The following quote illustrates the distinction he makes between community and what he calls communion:

Toennies (and everyone else) knows that rural neighbors may become mortal enemies when . . . a boundary is disputed, just as brothers may become enemies when an inheritance is challenged. Despite this, neighbors and brothers always remain neighbors and brothers. Neighborliness and brotherhood persist psychically. There is no better example anywhere to demonstrate how minor a role "feelings" play as a basis of community (1961: 335).

Following Weber's distinction between church and sect, Schmalenbach noted that "a church is a community, and may become a society. . . . Sect is pure communion" (1961: 332). Weber's distinction of traditional and affective bonds within a community is the key to Schmalenbach's dichotomy between community and communion. Communions are born of emotions and feelings with collective enthusiasm, while the basic condition of community is unconscious since:

community implies the recognition of something taken for granted and the assertion of the self

evident. Generally speaking, one will not expressly sanction or condemn those communities to which one belongs. One is not likely to be fully aware of them (1961: 334).

Schmalenbach used religious experience to illustrate the development of communion. According to him, the individual in a religious experience is alone with his deity. The encounter leaves the individual with "a strange and new perspective." At this point, the individual enters into a set of social relations with others who have had a similar experience which results in a reaffirmation "in a spirit of closeness and compassion" (1961: 336) and the communion is established.

An interesting application of Schmalenbach's distinction between community and communion is Zablocki's (1973) study of the Bruderhof Brotherhood. In the Bruderhof, the culmination of the experience of communion is the phenomenon of joy. According to Zablocki, joy is a twofold reward: "It provides direct emotional gratification to the individual, and it is his primary evidence that he and the community are in a state of grace" (1973:158-159). Joy is the product of the collective spirit or what Schmalenbach called communion.

According to Zablocki, there are two problems in harnessing the collective experience. First, the experience

must occur regularly with a high degree of intensity and, secondly, the experience "must be transformed into a useful form of energy" (1974: 164-165). In the first case, collective behavioral experiences, in general, are rarely intense due to disunity of values, goals, norms, and beliefs. Secondly, there is often an inability for members to participate fully due to the lack of full surrender to the group experience and the members' failure to understand the experience in positive terms. However, in the case of the Bruderhof, the collective experience of joy is harnessed into positive energy for the group by means of an interpretive framework which provides an explanation for the experience. This interpretive framework or ideology is vitally important since "it ensures that roughly the same external stimuli will touch of collective behavior experiences in all the community members at the same time" (1973: 184). The phenomenon of joy as a collective religious experience among the Bruderhof is the result of a conscious effort on the part of the membership to create communion. The point to be emphasized is that the basis of communion is emotions, and these are fleeting. Communion comes and goes, but the group remains a community.

If Schmalenbach is correct, that is, if communion is distinct from community, then the following possibilities

arise: (1) community can exist without communion (high degree of sentiment) and, by inference, (2) formal organizations do not necessarily lack communion. Concerning the latter, Simmel's (1964) description of secret societies is the case in point.²

In addition, there is some empirical evidence which suggest that participation in formal organizations can have a significant effect on sentimental attachments. For example, Albert Hunter (1975) found in one local community that after twenty-five years the use of local facilities declined, but informal neighboring remained constant and sense of community increased. In an analysis of the members' motives for moving there, Hunter identified three prominent attitudes: "(1) a conscious rejection of suburbia and a positive commitment to urban living; (2) a conscious move to a racially integrated area; and (3) a conscious search for a residential area which was seen to be community" (1975: 549).

²Simmel (1950b) described secret societies as "politically rejected" interest groups. Characteristic of secret societies were their high degree of internal cohesion and their use of mechanisms which, according to Kanter, were the same mechanisms used by successful nineteenth century utopian communities to promote commitment.

Hunter warned explicitly that these people were not living in a utopian community, but rather, they were trying to create a "partial ideology." Important for the distinction between community and sentiment is the fact that the residents decided to move into the area because of its pre-existing "community character," a characteristic which was congruent with their values. In accordance with Schmalenbach's dichotomy, the community always existed as a human group, but it was not until the conscious recognition by individuals of their similar values, and, as a result, their move into the area, did the community become a community with sentiment. In other words, the residents were attempting to consciously create communion (sentiment).

Hunter also pointed out that the members of the community also created "a more formal structural embodiment of community -- a local community organization" (1975: 547). This formal organization was formed to solve pollution and block-busting problems. Hunter found that participation in this formal organization had a significant effect upon sense of community. In other words, sentiment resulted from the conscious efforts of the members, based on a partial ideology, and was further enhanced by participation in a formal organization.

Summary

The idea that community is a relationship based on emotional ties, and therefore, characterized by a high degree of sentiment is a theme which is reflected in the literature from early classical writing to contemporary theory. For Tönnies, when relationships shift from traditional ties to secondary ties, they are no longer community, but rather society. Simmel wrote that life in rural areas, as opposed to the metropolis, "rests more upon deeply felt and emotional relationships." Redfield viewed the city as disorganized because the organization of the city promoted detachment of individuals from familial ties, beliefs, and rituals which are the sources of understanding. Kornhauser called formal organizations which attempt to provide meaning, solidarity, and support for individuals, pseudo-community.

Although modern research has supported the idea that primary ties exist both in the form of friendship and family networks, and that there are sentimental ties to other forms of community (neighborhoods and villas) in modern society, the question remains whether or not sentiment is the exclusive property of community. The problem is not so much that primary ties exist, because research has shown that they do. Rather, it seems there has been a tendency to view sentiment-

tal attachments as finite. That is, since modern people have a higher rate of participation in formal organizations, not only has the strength of communal ties weakened, but also the ties which develop in formal organizations are weak as well.

The question of whether or not communal ties are weaker in modern society is beyond the scope of this research. However, the degree of strength of sentimental attachments (as measured by cohesion) in communal and formal organizations will be compared to determine whether there is a difference between them. Schmalenbach's conceptual distinction between community and communion in conjunction with empirical findings which suggest that participation in formal organizations can enhance sentiment indicate that perhaps sentiment is not limited to communal organizations.

Schmalenbach argued that communion arises from consciousness of shared emotional experiences. Zablocki noted that the collective experience of communion (joy) among the Bruderhof was transformed into positive energy for the group and the experience made understandable by means of an interpretive framework (ideology). Hunter stated that the residents of the local community he examined were attracted to the areas because its "community character" was congruent

with their values; that is, the residents shared a partial ideology and consciously attempted to put it into practice. In addition, participation in a formal organization fostered "sense of community." These ideas suggest that if an organization has mechanisms which encourage conscious recognition of shared values, regardless of whether or not its organization gives primacy to specific goals, it is more likely to have a high degree of sentiment.

Using Hillery's distinction between organizations which give primacy to specific goals and those which do not, and using cohesion as a measure of sentiment, the relationship between type of organization (communal and formal) and cohesion will be investigated. Stated in hypothetical form the relationship to be tested is:

H1: Communal organizations have higher degrees of cohesion than formal organizations.

Chapter III

COHESION

Definition and Theoretical Underpinnings

In the field of group dynamics, the most widely accepted definition of cohesion is that developed by Festinger et al. (1950) who stated that cohesion is "the resultant of all forces acting on members to remain in the group." Schachter et al. (1951) have noted that there are roughly two categories of definitions assigned to the term. In one class of definitions cohesion refers to the attractiveness of the group for its members. Studies in this category are concerned exclusively with attraction and its causes and effects. The second category of definitions focuses on cohesion as group morale, or its atmosphere, and how these affect group efficiency and productivity in performing tasks. In the latter case, attraction is only implied and is of secondary importance. But no matter what definition of cohesion is preferred, "virtually all definitions have the clear implication that cohesion varies with the attraction of the group for its members" (Schachter, 1968: 542).

The notion that attraction is the underlying theme in the definition of cohesion can be seen in the ways it has been measured. Cohesion has been measured in terms of: (1) interpersonal attraction such as friendship and sociometric

indexes of interpersonal liking (Dimock, 1941; Festinger et al., 1950); (2) evaluations of the group as a whole (Jackson, 1959; Mann and Baumgartel, 1952); (3) identification with the group (Converse and Campbell, 1968); and (4) desire to remain in the group (Schachter, 1951). In addition, there are composite indexes of cohesion. For example, Seashore's (1954) cohesion index taps the following dimensions of cohesion: (1) identification with the group, (2) desire to remain, and (3) general satisfaction or morale which was measured by asking respondents to compare the group with similar groups in terms of the way the members get along, help each other, and stick together.

Scientific interest in the concept cohesion developed from laboratory experiments which were designed to understand the nature of attraction and affiliative needs. Festinger, Pepitone, and Newcomb (1952) stated that two types of needs are satisfied by group membership: the need for recognition, approval, and esteem which involve a high degree of social visibility, and the need to be "submerged in the group" which involves a high degree of social invisibility. They called the latter condition deindividuation and described it as a group phenomenon in which "individuals are not seen or paid attention to as individuals" (1952: 382).

According to those authors, individuals have inner restraints which suppress certain kinds of behavior. When deindividuation occurs, these inner restraints are weakened and result in the expression of needs which might not otherwise be satisfied. By means of a laboratory experiment, Festinger et al. found evidence to support the conclusion that deindividuation does occur and that it positively affects the members' attraction to the group. According to them, groups which alternately satisfy needs for individuation and deindividuation will be more attractive to their members.

A different class of needs satisfied by group membership was addressed by Festinger (1954) in a theoretical paper in which he wrote that individuals have a need to assess the validity of their opinions and abilities when these lack confirmation in physical reality. These needs are the result of a drive for self evaluation and require membership in groups for validation by means of social comparison. In connection with this, Festinger wrote:

To the extent that self evaluation can only be accomplished by means of comparison with other persons, the drive for self evaluation is a force acting upon persons to belong to groups, to associate with others. And the subjective feelings of correctness in one's opinions and the subjective evaluation of adequacy of one's performance on important abilities are some of the satisfactions that persons attain in the course of these associations with other people. How strong the drives

and satisfactions . . . are . . . is impossible to say, but it seems clear that the drive for self evaluation is an important factor contributing to making the human being "gregarious" (1954: 135-136).

The theoretical underpinning of the drive for self evaluation by means of social comparison is Festinger's (1957) theory of cognitive dissonance. According to this theory, an individual "strives toward consistency within himself" (1957: 1). When inconsistencies among an individual's cognitions exist, the person is in a state of cognitive dissonance which motives him to reduce it and to reestablish consonance. Cognitive dissonance "can be seen as an antecedent condition which leads to activity oriented toward dissonance reduction just as hunger leads to activity toward hunger reduction" (1957: 3). The drive for self evaluation when an objective reality is not available causes the individual to seek out a social arena within which to evaluate his opinions and abilities.

However, the social setting itself can be a source of dissonance as in the case when discrepancies between an individual's opinions and those of others in a group emerge. Here, again, there is dissonance and a corresponding drive to reduce it. According to Festinger, the reduction of dissonance can occur in three basic ways: (1) the actor can change his opinion so that it is more consistent with the

opinions of others; (2) the actor can attempt to change the opinions of others so that theirs more closely resembles his; or (3) if the discrepancy of relevant opinions is quite large, the actor can cease comparison by rejecting others as deviants, or, in other words, by "attributing noncomparability to others" (1957: 182-183).

An interesting example of the reduction of dissonance which arose as a result of physical evidence which disproved beliefs was studied by Festinger, Riecken, and Schachter (1956) in their case study of a millennial group. This group of twenty-five upper middle class people was centered around a woman who received messages from Guardians from outer space. One of the messages received revealed that on a certain day a flood would destroy the world.

Proselytizing for the belief system was low prior to the predicted date of the cataclysm since it was believed that those who had been chosen to survive would join the group of their own accord or would be spared at the time of the disaster. Those not chosen to be saved would merely lose their physical bodies in the flood, but their spiritual beings would be transported to another planet. It was believed that those who were to be saved would be picked up by flying saucers.

The most committed members of the group quit their jobs, discarded possessions, and were careless with their money in preparation for the event. Some members (college students) were instructed to go home and wait for flying saucers to pick them up while others gathered at the home of the woman who received the messages.

Of course, the flood never came, but the dissonance created by physical evidence contrary to their beliefs was reduced by the impact of social influence. In spite of physical disproof, those who waited with other members of the group, as opposed to those who waited in their homes isolated from the others, were able to maintain their beliefs by providing an explanation for the failure of the event to materialize. A message from God had been received which stated that the world had been spared because of the positive influence the group had exerted on the world, spreading light and strength. At this point, proselytizing increased dramatically in an attempt to validate their beliefs by means of recruiting additional believers, and therefore, greater support. Dissonance was reduced by the development of an explanation for the failure of their prediction and by proselytizing others in an attempt to validate it.

The preceding example illustrates that needs for self evaluation and dissonance reduction not only appear to be significant motivators for group affiliation and, as a result, affect the attractiveness that the group has for the individual, but also that group affiliation can maintain beliefs in spite of compelling evidence to the contrary. In addition, laboratory experiments have concluded not only that the amount of anxiety experienced is associated with one's desire to affiliate with others (Schachter, 1959), but also that these two needs (self evaluation and dissonance reduction) are independent of one another and a group which satisfies both is more attractive to its members (Gerard and Rabbie, 1961).

Another theoretical orientation which addresses the individual's attraction to a group was that presented by Thibaut and Kelley (1959) in their theory of social interaction. According to them, individuals evaluate groups in terms of the expected outcomes or consequences of participating in a group by means of calculating the costs and rewards of interaction. Expected outcomes of group membership are evaluated by the individual in terms of his comparison level based on past experiences. For example, if an individual's level of expected outcomes from participation in a group is higher than his comparison level based on past

experiences, then the person will find the group attractive. Conversely, if the expected outcomes are lower than the comparison level, then one would expect the individual will not find the group attractive.

The concepts expected outcomes and comparison level deal specifically with the attractiveness of a given group for an individual. However, in evaluating attractiveness, Thibaut and Kelley maintain that there is an additional factor involved in the process. They called this element the comparison level of alternatives. This determinant of attraction deals with the attractiveness of alternative memberships. According to Thibaut and Kelley, if the comparison level of alternatives is lower than the expected outcomes, the individual will be highly attracted to the group. Conversely, if the comparison level of alternatives is higher than expected outcomes, the individual will not be attracted.

In his general scheme for analyzing the nature of cohesion, Cartwright (1968) utilized Festinger's definition of cohesion and, following the lead of Thibaut and Kelley, maintained that the forces which result in cohesion are of two major types: (1) the attractiveness of the group to its members and (2) the attractiveness of alternative member-

ships. These forces, then, are processes which involve the attachment (attraction) of members to the group and detachment from alternatives.

Cartwright's scheme proposes that members' attraction to a group is determined by four factors: (1) the incentive properties of the groups; (2) the motive base of the members; (3) the expectancy of outcomes; and (4) the comparison level. These elements interact to produce cohesion which, in turn, produces certain consequences. Synthesizing the literature on the topic of cohesion, Cartwright (1968: 92) developed the model presented in Figure 1.

Groups are attractive to people on the basis of the needs that groups have the potential to fulfill and, as a result, the degree of attractiveness will vary by the motivation base of the members and group incentive properties. In addition, although he neither depicted it graphically nor described the process, Cartwright noted that "there is good reason to believe that some of the consequences serve also as determinants" (1968: 106). This is a circular causal process whereby the degree of cohesion results in certain consequences which, in turn, affect cohesion. This process was addressed by Homans (1950) in his discussion of the interaction of group elements and elaboration.

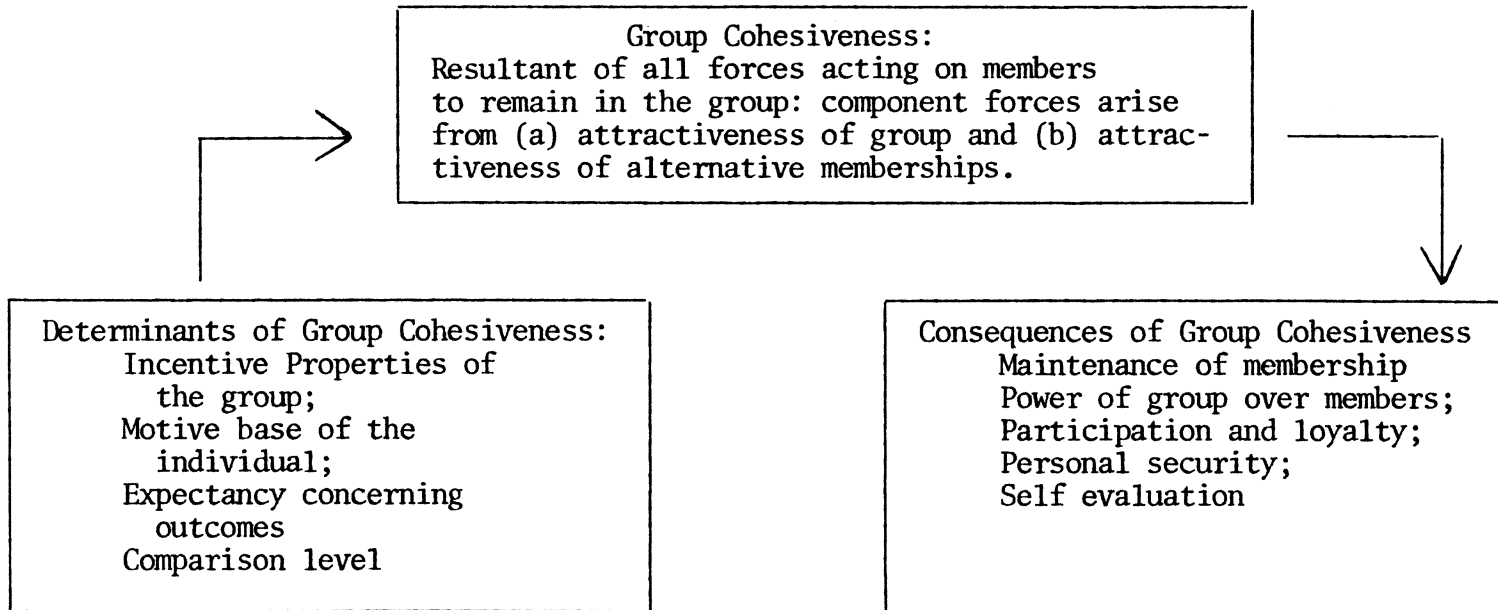


FIGURE 1

CARTWRIGHT'S SCHEME FOR ANALYZING COHESIVENESS

Cohesion as a Measure of Sentiment

Although Homans (1950) called it sentiment in the internal and external subsystems of the group, he was interested in the interaction between group elements and individual motives, as well as the process whereby the consequences of cohesion feedback into cohesion. He called this process elaboration.

Homans defined the group in terms of its external and internal subsystems. Critical aspects of both subsystems are the interrelationships among what he called the elements of the group: (1) activity, (2) interaction, and (3) sentiment. Although these concepts are distinct for analytical purposes, they are mutually dependent and, therefore, one cannot be discussed without reference to the others. However, while these elements are interrelated, the element of sentiment is particularly important to this discussion.

For Homans, the external system of a group is defined by the interrelationships among the three elements as the group attempts to solve the problem of survival in its environment. Homans defined sentiment as "internal states of the human body" (1950: 37). Examples of these internal states are such feelings as affection, pride, scorn, emotions, attitudes, and even such physical states as hunger

and thirst. In the external system sentiment assumes the form of the members' motives for joining the group. To illustrate, Homans described the element of sentiment in the external system of a factory work group as follows:

The Bank Wiremen came to the Hawthorne Plant in the first instance with certain motives (sentiments in the external system). The motives were generated by the circumstances of their lives outside of the plant, but they were also part of their behavior (1950: 94).

The members' motives for joining the group were the result of what Cartwright called the interaction of the members' motive base and the incentive properties of the group.

In Homans' discussion of sentiment in the internal system, its meaning appears restricted to affective attitudes concerning the group itself (internal system). In the internal system, sentiments are different from the motives for joining in the first place. Homans even defines the internal system in terms of sentiment:

The internal system [is] the elaboration of group behavior that simultaneously arises out of the external system and reacts upon it. We call the system "internal" because it is not directly conditioned by the environment, and we speak of it as "elaboration" because it includes forms of behavior not included under the heading of the external system. . . . The internal system [is] group behavior that is an expression of the sentiments towards one another developed by the members of the group in the course of their life together (1950: 109-110).

According to Homans, it is through the process of elaboration and of continued mutually supportive interaction and activity that the motives of the members for joining the group develop into sentiments for the group itself. The motives for joining, which are external to the group, become transformed into different motives for desiring to remain. By interacting with one another, the members come to like one another; they develop attachments which emerge as a result of interaction and activity. To illustrate the process of elaboration of sentiment in the internal system, Homans presented the following hypothesis:

If the frequency of interaction between two or more persons increases, their degree of liking for one another will increase and vice versa (1950: 112).

Persons who feel sentiments of liking for one another will express those sentiments in activities over and above the activities of the external system, and these activities may further strengthen the sentiments of liking (1950: 118).

In addition, Homans went on to state that self-interests (sentiment in the external system) become subordinate to group interests in the internal system.

Homans noted another process, called mode of standardization, which also involves the interaction of group elements. The mode of standardization involves "forces making for uniformity" (1950: 121). Homans discussed standardiza-

tion in terms of the establishment of group norms and social control.

According to Homans, as a group elaborates it develops expectations or ideas about what ought to be. He emphasized that these norms are not actual behavior, but rather "an idea in the minds of the members of groups" (1950: 123). Yet, while norms emerge as a product of the mutual dependence of interaction, activity, and sentiment, and represent notions about what ought to be, nonetheless, conformity to norms tends to be rewarded and nonconformity punished.

The group's ability to apply effective social control is dependent upon the degree of interaction and activity which, in turn, affect sentiment. In his discussion of the decline of social control in Hilltown, Homans wrote that because the frequency of interaction and activity decreased, the strength of interpersonal sentiments decreased. The effect of decreased interpersonal sentiments was to weaken the social unit's ability to reward and punish. "Control is a matter of punishment and reward of individuals" (1950: 366). In other words, the greater the degree of interaction, the greater the degree of positive sentiment and the more effective social control is in producing conformity.

It is the position in this study that Homans' analysis of the process of interacting elements and the processes of elaboration, development of group norms, and social control in the internal system address the circular process Cartwright noted concerning the feedback of consequences of cohesion. With regard to the hypothesized relationships between sentiment and interaction, Homans stated, "the relationship expressed . . . is a part of the phenomenon that sociologists call 'in-group solidarity'" (1950: 114).

Kanter's Commitment Mechanisms Model

Another scholarly work which addressed the interaction of group incentive properties, individual motives, and the consequences of cohesion was Kanter's (1972) study of utopian communities. While she called the organizational incentive properties commitment mechanisms, her primary interest was in how group mechanisms operated to increase the likelihood that members will evaluate membership positively. In addition, the use of these mechanisms increases the likelihood of positive consequences for the group: (1) retention of members, (2) interpersonal attraction (or what Kanter called cohesion), and (3) social control or conformity.

To reiterate briefly, the reader will recall that in Cartwright's scheme for analyzing cohesion, the determinants of cohesion involved the interaction between individual motives and group properties, and forces which detach members from alternative memberships and attract them to membership in a given group. The result of these is cohesion which, in turn, produces certain consequences. Although she called it commitment, Kanter addressed what researchers in the field of group dynamics call cohesion. As it will be shown, Kanter's work focused on the interaction of individual motives (what she called individual orientations) and group mechanisms (commitment mechanisms) and their consequences for the social systems (which are aspects of cohesion).

According to Kanter, members have orientations which they use to evaluate their membership in a group. She identified three individual orientations: (1) an instrumental or cognitive orientation which involves the calculation of the costs and rewards of belonging to the group; (2) an affective or cathectic orientation which involves the individual's emotional attachment to the group; and (3) a moral or evaluative orientation which concerns standards or judgments of right and wrong (1972: 62-68). According to Kanter, individuals evaluate their membership in terms of these

orientations and contends that the group can increase the likelihood of a positive evaluation if the group employs certain mechanisms.

Kanter identified the following six mechanisms: (1) sacrifice, (2) investment, (3) renunciation, (4) communion, (5) mortification, and (6) transcendence. Sacrifice and investment are mechanisms which promote instrumental commitment and secure the retention of members; renunciation and communion promote a positive affective orientation and will enhance interpersonal attraction; mortification and transcendence promote a positive moral orientation and increase the members' willingness to conform to group norms or, to put it another way, increase the group's power. A summary of Kanter's work is presented in Table 2.

The reader will note that the three pairs of mechanisms each involve a detaching process (detachment from alternative memberships) and an attaching process (attachment to the group). Sacrifice, renunciation, and mortification detach members from alternatives, while investment, communion, and transcendence are mechanisms which attach members to the group. Given the definition of cohesion as the resultant of all forces acting on members to remain in the group, and that these forces involve detaching and attaching

TABLE 2
 SUMMARY OF KANTER'S COMMITMENT
 MECHANISMS MODEL

<u>Mechanisms</u>		<u>Individual's Orientation</u>	<u>Consequences for the Social System</u>
<u>detaching</u>	<u>attaching</u>		
sacrifice	investment	instrumental	retention of members
renunciation	communion	affective	interpersonal attraction
mortification	transcendence	moral	conformity

processes, it is the position in this study that these mechanisms increase the likelihood of attraction to the group and are, therefore, determinants of cohesion. In addition, the consequences of these mechanisms for the group, retention of members, mutual attraction, and conformity (group power), are the consequences of cohesion. In other words, by means of positively affecting members' orientations, these mechanisms increase the likelihood of high group cohesion.

Sacrifice and Investment. In defining these commitment mechanisms, Kanter (1972: 76) stated that sacrifice is the price of membership.

Sacrifice operates on the basis of a simple principle from cognitive consistency theories: the more it "costs" a person to do something, the more valuable he will consider it, in order to justify the psychic "expense" and remain internally consistent.

In her discussion of successful nineteenth century communes, Kanter described the process of sacrifice by demonstrating its concrete application in these communities. Abstinence, as the cost of membership, took many forms, whether it was refraining from the use of tobacco, alcohol, meat, coffee, or sex. While the forms of abstinence were rooted in ideological proscriptions, clearly communes were aware of the role of sacrifice in enhancing positive instrumental evaluations from their members.

An additional mechanism utilized by successful nineteenth century communes was the signing over of all personal property to the community upon becoming a member. This is the mechanism Kanter called investment.

Through investment, individuals are integrated with the system, since their time and resources have become a part of its economy (1972: 81).

The investment of personal property, time, and energy in the community operated to enhance commitment since investment tended to be irreversible. Simply put, once these had been invested, the only way in which to get a return was through continued participation. By investing both material goods and time and energy, members invested their profits to the group "so that leaving it would be costly" (1972: 80).

Empirical findings from laboratory experiments lend support to the notion that people who must sacrifice or go through an unpleasant experience to attain something tend to value it more highly than those who attain the goal or object with minimal effort. Aronson and Mills (1959) conducted one such laboratory experiment involving the degree of severity of initiation for joining a club and the degree of attractiveness the group has for the members. Thus, Aronson and Mills hypothesized:

a person who has gone through a painful initiation to become a member of a group should tend to

reduce dissonance by over estimating the attractiveness of the group (1959: 178).

Their hypothesis was confirmed. Those participants who had not undergone an unpleasant initiation experience had so little invested in the group that there was little, if any, dissonance created by the fact that membership in the group was very boring. Those who had undergone a severe and embarrassing initiation and, therefore, had invested in membership, reduced dissonance which was aroused by uninteresting group discussions by over estimating the attractiveness of the group.

In another experiment, Aronson (1961) found that when a person puts forth considerable effort to accomplish a task but receives little reward, dissonance arises as a result of the discrepancy between the effort expended and the reward obtained. Aronson's findings lend support to the position that dissonance was reduced by finding something attractive about the situation which justified the effort expended.

Along these same lines, Festinger and Carlsmith (1959) found that when a person makes a public statement contrary to his or her private opinion, the degree of dissonance created is dependent on the size of the reward. If the reward is small, greater dissonance emerges and the individual will, therefore, reduce it by changing his private

opinion to correspond more closely to the public statement. The unpleasantness of making a public statement contrary to a private opinion coupled with a small reward results in an attempt to reduce dissonance by convincing oneself that the situation was not as unpleasant as it first seemed.

The interface of these laboratory experiments and Kanter's work suggests that if a group requires its members to sacrifice and invest, requiring that profits can only be realized by continued participation, even if the reward is small, the dissonance created by the situation will result in greater attraction for the group. In other words, if a group employs sacrifice and investment mechanisms, the members' attraction to the group, or its cohesion, increases.

Renunciation and Communion. Renunciation and communion are mechanisms which, according to Kanter, also promote commitment by means of detachment and attachment. Kanter states that by seeking renunciation, "a community discourages relationships both outside the group and with internal subunits, in order to provide maximum strength to the entire system" (1972: 82). By cutting off outside relations, members concentrate on loyalty and emotional attachments to the group. In experimental communities, the severing of contact with those outside the group required that

members cultivate relationships within the group. Members' "potential for satisfaction within the group increases as options for relationships elsewhere are decreased" (1972: 83).

To illustrate the mechanisms of renunciation and communion, Kanter stated that utopian communities represent "a refuge from the troubles of the world as well as hope for a better one" (1972: 1). The troubles of the world are viewed as either religious, politico-economic, or psychosocial contamination. The utopian visions of pure community led to the idea that the experimental community was the arena where these objectives can be achieved. Renunciation and communion were utilized by successful nineteenth century communes in terms of "insulating boundaries -- rules and structural arrangements that minimized contact with the outside" and emphasized interaction within the group (1972: 83).

In addition, Kanter stressed the importance of a psychic boundary in insulating the group from the outside. In this connection, language played a key role in differentiating "we" from "they." It is interesting to note that fifty-seven percent of the successful communes, as opposed to none of the unsuccessful communes, had special terms for

outsiders. Likewise, a distinctive language and style of dress also created insulating boundaries.

More successful than unsuccessful communities tended to employ these mechanisms, whether speaking a language other than English, using slang, jargon, or esoteric terminology not in common use on the outside, or adopting an unusual uniform (1972: 84-85).

Controlling the movement across boundaries, whether it was members leaving the group or nonmembers entering it, was characteristic of successful communes. Rules for regulating the frequency of cross-boundary movements were strict for all successful communities. For those groups, the average member rarely (less often than yearly) left the community as opposed to none of the successful communities having this strict regulation.

By cutting off or regulating contact with the outside, communities simultaneously encouraged relationships within the group and, subsequently, enhanced the development of we-feelings. In Kanter's examination of communes, regularized group contact in the form of rituals, the amount of time spent a day in the group, and the practice of regular group meetings were more characteristic of successful groups. Sixty-three percent of the successful communities as compared with only twenty-three percent of the unsuccessful ones had members who spent more than two-thirds of the

day with the group. In addition, all successful groups had regular group meetings. Regularized group contact by means of the amount of time spent in the group, coupled with routine meetings, apparently contributed to success.

The reader will recall that Homans (1950) hypothesized that as the frequency of interaction increased, the degree of liking increased. However, he qualified this statement by noting that the hypothesis should hold if the activities engaged in are not irritating to any of the parties involved and if the relationship is not based on authority. Regarding the first qualifying statement, successful communes tended to rotate jobs requiring everyone to share in both pleasant and unpleasant tasks. Communal labor, based on job rotation, should, therefore, reduce the chances that irritating activities will interfere with the relationship between frequency of interaction and degree of liking. Secondly, regularized group meetings in successful nineteenth century communes apparently encouraged members' attraction to the group by keeping members abreast of events and informed, and by encouraging participatory democracy. Concerning the later, experimental studies have provided evidence that this style of leadership and decision-making is more attractive to members than are autocratic or laissez-faire types (White and Lippitt, 1968; Preston and Heintz, 1949; Bovard, 1951).

In summary, renunciation and communion were mechanisms used by communes to increase in-group solidarity by detaching members from outside relations while encouraging relationships within the group. Therefore, based on these findings, it would be expected that groups which employ renunciation and communion mechanisms will be characterized by a higher degree of cohesion than those groups which do not employ them.

Mortification and Transcendence. Mortification and transcendence are mechanisms which foster moral commitment. Respectively, these are also detaching and attaching processes which focus on the transformation of an individualistic ego into a group ego.

Detachment from the world through mortification requires that the individual redefine his priorities and values. It is the idea that a re-evaluation of the "old self" is essential. Mortification is a stripping process. Transcendence, on the other hand, is an attaching process whereby the individual finds new direction and a different kind of ego in the collective. A specific ideology or value system plays an important role in transcendence in enhancing moral commitment. As Kanter (1972: 115) pointed out:

The ideology in successful groups . . . legitimated demands made on members by reference to a higher principle which gave meaning to the demands.

While mortification requires that the individual reevaluate his or her values, transcendence provides new standards. Mortification strips the ego while transcendence builds the collective ego.

According to Kanter, confession, self-criticism, and mutual criticism were mechanisms which promoted moral commitment through mortification. Research findings from laboratory experiments have concluded that the degree of cohesiveness is positively associated with attempts to reduce discrepancies of opinions and beliefs among group members so that these become more similar. That is, research findings have concluded that there are positive relationships between cohesion and in-group attempts to reduce discrepancy of opinions (Back, 1951); between cohesion and the extent of change in opinion among deviants (Festinger, Gerald, Hymovitch, Kelley, and Raven, 1952); and between cohesion and the likelihood of rejecting deviants (Schachter, 1951). From these findings it would be expected that when values are relevant to the group's purposes, there will be greater attempts to change those who are deviant. According to Kanter, the use of confession and mutual criticism not only brought the deviant to public attention and humbled the erring member, but it also served as an example to the rest of the community.

Other mortification mechanisms addressed by Kanter were spiritual differentiation and deindividuation. Successful nineteenth century communities were more likely than unsuccessful ones to have a stratification system based solely on spiritual differentiation. A member gained status by living up to the model of the community, and no other distinctions were recognized which would allow members "to take pride in anything but their fulfillment of the conditions for ideal membership" (Kanter, 1972: 109-110).

The stripping away of the "old self" was achieved by means of formal instruction in community doctrine, segregation of new members from old members, and the institutionalization of a formal probationary period for a novice prior to becoming a full member. In addition, while spiritual differentiation was the means by which to achieve status, by de-emphasizing other types of differentiation, deindividuation encouraged a group identity.

De-individuating mechanisms are strategies for removing the individual's sense of isolation, privacy, and uniqueness. They change his identity so as to anchor it in things that are communal rather than personal (Kanter, 1972: 110).

However, mortification of the old self is incomplete unless new standards of evaluating the self are provided. This involves the attaching process of transcendence. Transcendence mechanisms in the form of an ideology provided a

sense of order, rightness, and institutionalized awe which "gives meaning to the organization" (Kanter, 1972: 113). Ideology not only provided legitimation for the demands placed on members, but also provided explanations for several aspects of life, including the nature of humanity, and economic, social, familial, and social organization.

It is interesting to point out that while successful communes were more likely than unsuccessful ones to have a comprehensive ideology with differentiation based on spiritual matters, the leadership in those groups was distinct from ordinary membership. The reader will recall that successful communities were more likely to have regularized group contact and participatory democracy. However, member participation in decision making was generally restricted to routine, everyday decisions while the ultimate decision making process was carried out by the leadership. Leaders were frequently purportedly imbued with special powers "who served as the link between members and those of higher sources of wisdom and meaning" (1972: 116).

In addition, charismatic leaders were usually surrounded by a select group of subordinates who handled more routine matters thus protecting the inviolability of the leader. Leadership in successful nineteenth century com-

munes tended to be imbued with charisma and protected by subordinates. These factors combined with participatory democracy for routine decisions and ultimate centralized control concerning matters related to values encouraged moral commitment.

Ideological conversion was another transcendence mechanism which contributed to the success of nineteenth century communes. As Kanter pointed out, the particular content of the ideology was not the important factor which promoted success, but rather that the members believed and shared an ideology. Conversion, then, as a requirement of membership, was an important element aiding transcendence. Practices such as requiring a vow, the institution of a screening procedure for recruits, including a probationary period, and the rejection of potential members occurred more frequently in successful communes than in unsuccessful ones.

Kanter's work suggests that groups which utilize mortification and transcendence mechanisms will be more likely to enhance positive moral evaluations of its members. From this, it would be expected that groups which employ mortification and transcendence mechanisms will have a higher degrees of cohesion than those which do not.

Summary

Although Kanter's study focused solely on nineteenth century utopian communities, her work suggests that communities which employed the six mechanisms tended to be more successful than those which did not. Utopian communities are an extreme type of organization in that there is a conscious attempt based on an ideology to restructure or to create a specific type of social organization. In varying degrees, utopias employed these mechanisms to transform self-interest into group interest or, in other words, to replace individual ego with a collective ego.

For Kanter, commitment is the link between the organizational requirements of the social unit and the individual orientations of its members. According to her, "Commitment refers to the willingness of people to do what will help maintain the group because it provides what they need" (1972: 66). By instituting mechanisms which promoted three types of commitment (instrumental, affective, and moral), successful communities were able to increase the likelihood of positive consequences for the group: retention of members, interpersonal attraction, and social control.

Although utopias are an extreme type of social organization, findings from laboratory experiments and in natural

settings suggest that these mechanisms also operate in both artificially created groups as well as in "everyday" groups. Both theory and research suggest that the structure and orientation of a social unit affect members' orientation to the organization.

In Chapter Two it was argued that there has been a tendency to assume there is a difference between communal and formal organizations in terms of the degree to which members are attracted to them. One purpose of this research is to test that relationship. Secondly, the relationship between type of organization and cohesion was examined in light of the presence and absence of group mechanisms.

As a means of concluding this chapter six additional formal hypotheses are presented:

- H2: As the degree of sacrifice increases, cohesion increases.
- H3: As the degree of investment increases, cohesion increases.
- H4: As the degree of renunciation increases, cohesion increases.
- H5: As the degree of communion increases, cohesion increases.
- H6: As the degree of mortification increases, cohesion increases.
- H7: As the degree of transcendence increases, cohesion increases.

Chapter IV

METHODOLOGICAL PROCEDURES

Introduction

This chapter includes a description of the sample and the methodological procedures employed. The first section describes the sample while the second section addresses the sources of data. The third section includes a discussion of the scaling and measurement of the study variables, while the final section describes the data analytic techniques.

Given this study involved the use of data which were derived from different sources, the description of the methodological procedures which follows may at times become confusing. Although this writer has attempted to present the material in a clearcut manner, the reader is advised to consult the summary tables where they are indicated.

The Sample

The unit of analysis in this study is the group. The groups which made up the sample consisted of thirty groups with a total of 972 respondents drawn from Hillery's Organization File. This large data set was collected by George A. Hillery, Jr. and his students over a period of years by means of either: (1) an initial contact made by letter or in person followed by a mailed questionnaire, or (2) direct administration of the questionnaire to the groups.

The thirty groups which made up the sample consisted of the following: seven Trappist monasteries, two communes, six Greek social organizations (three fraternities and three sororities), three samples of Cadet Corps members, one drug rehabilitation center, five university dormitories, two prison staffs, one cooperative boarding house and three military groups.

Table 3 presents the classification of these groups into formal and communal organizations, indicates the purpose or specific goal of each, and reports the size of each subsample and the size of the population from which each was drawn. As indicated in the table, the sample consists of sixteen communal and fourteen formal organizations.

Sources of Data

Data for the dependent variable, cohesion, and two of the independent variables, sacrifice and type of organization, were derived from Hillery's Organization File. Data for the remaining independent variables were collected from panels of judges who were asked to tell the researcher about the general characteristics of the type of group by responding to a questionnaire. None was informed of the specific nature of the research and, in all cases but one, judges were either current or former members of the type of group they were asked to judge.

TABLE 3

GROUPS IN THE RESEARCH SAMPLE

Name and Type	Population Total Sample	Goal or Purpose
Communal Organizations		Purpose
Monastery 1 (1972)	68 50	Prayer
Monastery 2 (1972)	16 15	Prayer
Monastery 3 (1975)	34 16	Prayer
Monastery 4 (1976)	24 9	Prayer
Monastery 5 (1976)	63 21	Prayer
Monastery 6 (1976)	14 10	Prayer
Monastery 7 (1976)	50 28	Prayer
Caphas Commune (1973)	25 20	Christian witness
Walden Commune (1971)	36 33	To approximate Skinner's Walden Two
Martin House (cooperative boarding house) (1971)	34 29	Cooperative living; to experience "community," Christian witness
Sorority 1 (1971)	31 29	Sorority life
Sorority 2 (1975)	60 42	Sorority life
Sorority 3 (1975)	9 9	Sorority life
Fraternity 1 (1970)	39 33	Fraternal life
Fraternity 2 (1974)	21 21	Fraternal life
Fraternity 3 (1970)	41 34	Fraternal life

Dates data were collected are indicated in parentheses.

TABLE 3 (continued)
 GROUPS IN THE RESEARCH SAMPLE

Name and Type		Population Total Sample		Goal or Purpose
Formal Organizations				Goal
Men's prison staff 1	(1970)	?	49	Prisoners maintained
Men's prison staff 2	(1970)	?	33	Prisoners maintained
Military Medical Corps	(1976)	10	10	Patients treated
Women's Army Corps	(1976)	18	10	Clerical duties
Military Police	(1976)	500	46	Deviants apprehended
Cadet Corps 1	(1974)	28	17	Cadets graduated
Cadet Corps 2	(1975)	42	29	Cadets graduated
Cadet Corps 3	(1974)	396	215	Cadets graduated
Dormitory 1	(1973)	75	33	Students housed
Dormitory 2	(1973)	75	21	Students housed
Dormitory 3	(1971)	147	41	Students housed
Dormitory 4	(1970)	42	37	Students housed
Dormitory 5	(1972)	420	17	Students housed
Drug Rehab. Center	(1976)	27	15	Addicts treated

Dates data were collected are indicated in parentheses.

For each panel of judges, questionnaires were either mailed or given directly to a contact person for distribution. With the exception of the Walden Commune panel which returned four of the five questionnaires distributed, all other panels had a 100 percent rate of return. Out of fifty questionnaires which were distributed, forty-eight were returned for a total rate of return of 96 percent.

The selection of judges was based on availability and/or knowledge of a contact person. This constraint resulted not only in the varying number of judges per panel (ranging from three to seven), but also in requiring some of the panels to evaluate a cluster of groups as a single category. For example, instead of the more desirable approach of having a separate panel of judges for each of the monasteries in the sample, a single panel of judges was utilized to inform the researcher about the general characteristics of monasteries as a whole. Likewise, prison staff members served as judges for the prison staff groups; military personnel were judges for the military groups; members of sororities and fraternities were judges for the Greek organizations; members of the Cadet Corps were judges for the cadet groups; and dormitory residents were judges for the dormitory groups. Separate panels of judges who were members of the following groups evaluated: Caphas Commune,

Walden Commune, Martin House (a cooperative boarding house), and the Drug Rehabilitation Center. In total, there were ten panels of judges utilized in collecting data for thirty groups. Refer to Table 4 for a description of each of the ten panels.

The use of a single panel of judges to evaluate a cluster of similar groups is a shortcoming. However, since the questionnaire items posed to judges addressed general characteristics of organizations, it was felt that the assignment of the same score to a cluster of similar groups was justified. Furthermore, the composite reliability coefficient for interjudge agreement, reported in Table 4, indicated high agreement among judges which provided some empirical support for the procedure.

Judge Reliability

As an estimate of the reliability of data gathered from judges, a composite reliability coefficient for interjudge agreement (Holsti, 1969: 137) was calculated for each panel. The formula is one commonly used in the analysis of the reliability of coders in content analysis. (Refer to Formula 1 in Appendix A.)

TABLE 4
SUMMARY OF JUDGE PANELS

Type of Panel	N	Alpha	Description
Monasteries	5	.95	all current members
Greek Organizations	5	.91	3 current members; 2 alumni members
Prison Staffs	4	.91	all current members
Caphas Commune	5	.93	all current members
Walden Commune	4	.93	all current members
Cadet Corps	5	.92	all current members
Drug Rehabilitation Center	7	.96	all current members
Dormitories	5	.83	all current members
Martin House	3	.84	2 former members; a participant observer
Military	5	.97	2 retired officers; a veteran; active officer and enlisted man

The reliability of panels of judges was generally quite high with the military, monastery, and drug center judges indicating almost perfect agreement. In all but two cases the reliability coefficients were greater than .90. Martin House and the dormitory panels had reliability coefficients equal to .84 and .83, respectively.

Measurement and Scale Development

Of the eight variables used in this study, the dependent variable, cohesion, and one of the independent variables, sacrifice, were part of the original data set collected from members of the groups in the sample. A third variable, type of organization, was based on Hillery's dichotomous classification of organizations into communal and formal organizations.

The five remaining variables, investment, renunciation, communion, mortification, and transcendence, were measured with items taken directly from Kanter's work with data collected from panels of judges. Although Kanter's study included over 250 questionnaire items for measuring six concepts, items selected to measure these in the present study were determined on the basis of three criteria.

First of all, because the current research included different types of groups, as opposed to Kanter's study which dealt only with utopian communities, it was necessary to select items on the basis of their applicability to the groups in the sample. As such, any item whose content applied only to one type of organization (communal or formal) was automatically excluded.

The second criterion for inclusion of an item in a particular scale was Kanter's tabular presentation of the mechanisms. Here it should be noted that it was difficult to determine from Kanter's measuring instrument which items were included under a given mechanism. To resolve this difficulty, this researcher examined tables in Kanter's work which outlined submechanisms of each concept and located items in her questionnaire which corresponded to the submechanisms in the tables.

Finally, after data were collected from judges, each of the scales was analyzed for variable reliability using Cronbach's Alpha reliability coefficient generated by SPSS Subprogram Reliability which, as part of the output, includes the alpha if an item is deleted. Cronbach's alpha is a commonly used estimator of internal consistency. Based on the reliability coefficients, items were deleted from the scales

until no further improvement in reliability could be made. (Refer to Formula 2 in Appendix A).

At this point it should be noted that Kanter did not develop scales as such to measure her concepts. Instead, she provided a list of characteristics (submechanisms) which were indicative of each concept. From these lists items were extracted and subjected to reliability tests in order to develop scales for measuring the concepts.

Table 5 summarizes the derivation of each scale, the source of data, and measurement of the variables. As noted in Table 5, variables derived from data gathered from judges were measured by the sum of the means for items included in the scale while variables derived from Hillery's Organization File were measured in terms of the average percentage agreement. (The rationale for measurement is discussed in Chapter Seven.)

The Dependent Variable

The dependent variable in this study was cohesion. The scale used to measure cohesion was that developed by Stanley Seashore (1954) in his work in the area of group cohesiveness in industrial groups. Operationally, Seashore's scale taps three dimensions of the concept: (1) members' percep-

tion of being a part of the group, (2) their desire to remain in the group, and (3) their perception of the group as better than others in terms of the way the members get along, help each other, and stick together. According to Seashore,

The first two criteria appear to be relatively pure translations from the formal definition of cohesiveness. . . . The third criterion is in two respects less satisfactory. The definition requires an "objective" (i.e., not self-evaluational) measure of the degree of attractiveness. The available measure, however, appears to include kinds of relationships among group members other than those implied by mutual attractiveness. In addition, since the available measures are in terms of self-evaluation of the group, they contain an element of general satisfaction with the group -- perhaps properly called "morale." These measurement problems could not be avoided without impaired reliability and without omission of an aspect of the definition of the variable to be measured. It is not possible to determine the extent to which the cohesiveness measure is thus contaminated; however, the possible presence of these extraneous elements suggests a degree of caution in interpreting any relationship between the cohesiveness measure and measures of affect (Seashore, 1954: 36).

Seashore's warning that the scale may be contaminated is not problematic. In fact, since Homans' definition of sentiment reflected affect, as does the assumption in the community theory literature, Seashore's scale probably more accurately measures the phenomenon of interest in this research than other measures of cohesion.

TABLE 5

SUMMARY OF VARIABLE DATA SOURCE, MEASUREMENT,
AND RELIABILITY

Variable	Data Source	Measure- ment	Relia- ability	Level of Measurement
Cohesion	HOF*	Mean Percent Agree ment	.92	Interval
Type of Organiza- tion	HOF*	Presence/ Absence of Specific Goal**	---	Nominal (Dummy)
Sacrifice	HOF*	Mean Percent Agree ment	.93	Interval
Investment	Judges	Mean**	---	Interval
Renuncia- tion	Judges	Sum of Means	.74	Interval
Communion	Judges	Sum of Means	.89	Interval
Mortifi- tion	Judges	Sum of Means	.92	Interval
Transcen- dence	Judges	Sum of Means	.81	Interval

* Hillery Organization File

** Single item measure

Seashore's Cohesion scale has enjoyed widespread use since it is easily adaptable to a variety of groups. As such, a modified version of the scale was used by Hillery and is presented as follows:

Do you feel that you are really part of this group or community?

- _____ I am really a part of this group
- _____ I am included in most ways
- _____ I am included in some ways but not in others
- _____ I don't feel I really belong
- _____ I don't feel that I am a member of any community
- _____ Don't know or uncertain

If you had a chance to do the same kind of work in another group or community, how would you feel about moving?

- _____ I would want very much to move
- _____ I would rather move than stay where I am
- _____ It would make no difference to me
- _____ I would rather stay where I am than move
- _____ I would want very much to stay where I am
- _____ Don't know or uncertain

How does your community or group compare with other groups that you are acquainted with on each of the following?

- (a) The way the people get along together
- (b) The way the people stick together
- (c) The way people help each other

- _____ Better than most
- _____ About the same as most
- _____ Not as good as most
- _____ Don't know or uncertain

In order to derive a group measure of cohesion from individual responses, the mean percentage of each group who responded to high cohesion items was used. Concerning the first question in the scale, the percentage of the group who

answered either "I am really a part of this group" or "I am included most ways" was recorded. The percentage of the group who responded they "would want very much to stay" or "would rather stay" was recorded for the second question. A percentage of the group who evaluated the group as "better than most" for the way members get along, stick together, and help each other" was calculated for each of those items. The mean of these five percentages was used as the cohesion measure for each group.

Cronbach's alpha reliability coefficient for this scale was .92, which indicated the appropriateness of using these items as an index of cohesion. The mean of the percentages served as the group cohesion score.

The Independent Variables

Type of Organization. The classification of groups into formal and communal organizations was based on Hillery's dichotomy between groups which give primacy to specific goals (formal) and those which do not (communal). It is important to mention that the classification of the groups in the sample into formal and communal categories was the only variable in the study not subjected to independent verification by an outside source. Since it was not possi-

ble to locate judges who had both sufficient knowledge of Hillery's classification scheme and knowledge of the specific groups in the sample, this researcher examined the classification for its face validity.

Sacrifice. According to Kanter, sacrifice is "the price of membership." For the purposes of this study, sacrifice was operationalized according to Hillery's scale for measuring disciplined freedom.

Disciplined freedom was one of the three major types of freedom delineated by Hillery, Dudley, and Morrow (1977) using factor analysis. Although the freedom scale produced three factor loadings, egoistic, conditional, and disciplined freedom, only the latter was used in the current research. Using Likert-type response categories of strongly agree, agree, don't know, disagree, and strongly disagree, the disciplined freedom scale used to measure sacrifice included the following:

Freedom here is closely linked with the idea of sharing and sacrificing.

Freedom here is disciplined and each makes concessions to help the others.

There is freedom here, but to have it, each person must give up something to help others.

The decision to use Hillery's disciplined freedom scale as a measure of sacrifice was based on three criteria.

First of all, although the scale is general and does not ask about specific sacrifices, disciplined freedom was conceptualized as "sacrificing in order to do something you want to do" (Hillery, et al., 1977: 687). Secondly, the items in the scale are consistent with the other independent variables in this study in that they ask about the nature of the concept in the group. Thirdly, the data on this measure were collected from the groups in the analysis (not from judges). Concerning the latter, it was felt that whenever possible it was desirable to use data collected from the original groups.

Like the cohesion measure, in order to derive a group measure of sacrifice, the percentage of the group who answered high sacrifice items (strongly agree and agree) was calculated for each item. The alpha reliability coefficient for this scale was .93 indicating sufficient reliability for using the mean of the percentages as the index of sacrifice.

Investment. According to Kanter, investment differs from sacrifice in that the latter detaches members from alternative memberships while the former attaches members to the group. Investment attaches members in the sense that in order to reap benefits of membership members must remain in the group. Investment is "a simple economic process involv-

ing tangible resources, or . . . intangibles like time and energy" (Kanter, 1972: 80). According to her, investment includes three aspects: physical participation, financial investment, and irreversibility of investment. To operationalize these the following items were used and coded as indicated:³

*Are nonmembers or members who are not active allowed to share in group benefits?

_____ yes (1)
 _____ no (3)
 _____ uncertain (2)

*In this group is a member asked to sign over property or make a financial contribution (include payment of fees or dues)?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

In actual practice, if a member of this group wishes to withdraw, does the group reimburse him or her for labor, services, property, or money the member has contributed?

_____ yes (1)
 _____ no (3)
 _____ uncertain (2)

Data for these questions were collected from panels of judges. For each item, the mean score of the panel of judges was used as the measure.

³For investment, renunciation, communion, mortification, and transcendence, items which were deleted as a result of reliability analysis are indicated with an asterick.

The alpha coefficient for these items was quite low, .26. Examination of the alpha if the item was deleted showed only marginal improvement could be made. The low alpha coefficient indicated that these items were not measuring the same phenomenon and, therefore, could not be used as an index for investment.

However, rather than exclude investment from the analysis, an examination of zero-order correlations of each item with the dependent variable showed a significant relationship between cohesion and the item dealing with reimbursement of property, labor, and services ($r=.74$) significant beyond the .001 level. This item was selected as the single measure of investment measured by the mean score of each panel.

Renunciation. According to Kanter, renunciation is a mechanism which corresponds to group interaction. Renunciation is a detaching mechanism since it primarily involves submechanisms which emphasize distinctions between "we" and "they."

Again, using Kanter's table of submechanisms as a guide for selecting items to measure renunciation, the following items were extracted and coded as indicated:

Does this group encourage (or require) its members to wear a uniform style of dress or symbol (for example, a uniform or emblem) which distinguishes them from persons who are not members?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

Does this group use any slang, jargon, special terminology, or a foreign language not in common use outside this group?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

*Does this group have specific hours during which nonmembers may visit the group?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

Does this group allow nonmembers to attend meetings or discussions?

_____ yes (1)
 _____ no (3)
 _____ uncertain (2)

Does this group have certain areas (locations) which are off-limits to nonmembers?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

Does this group have rules about how members should act around nonmembers or visitors?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

The alpha coefficient for these items was .71. However, with the deletion of the item concerning visiting hours, the

alpha was .74. An examination of the adjusted scale using the alpha if the item was deleted as a guide indicated no further improvement in reliability could be made. The means for each of the five remaining items was summed and used as the group measure of renunciation.

Communion. Communion is a mechanism which, like renunciation, is related to interaction. Communion is an attaching mechanism which, according to Kanter, promotes affective bonds (interpersonal liking):

Does this group rotate jobs among its members or do the same people do the same jobs all (or most) of the time?

- _____ this group rotates jobs (3)
- _____ the same people do the same jobs (1)
- _____ uncertain (2)

Does this group (or most of its members) ever get together in a group effort to perform group tasks such as harvesting, cleaning, building, etc.?

- _____ yes (3)
- _____ no (1)
- _____ uncertain (2)

Does this group have songs about itself or engage in group singing?

- _____ yes (3)
- _____ no (1)
- _____ uncertain (2)

Does this group ever celebrate special dates in the group's history?

- _____ yes (3)
- _____ no (1)
- _____ uncertain (2)

*Are members of this group given the opportunity to participate in everyday routine decisions?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

The alpha coefficient for these five communion submechanisms was .79. However, with the deletion of the item which addressed membership participation in decision making reliability increased to .89. The sum of the means for the four remaining items served as the index for communion.

Mortification. Kanter conceptualized mortification as a detaching mechanism which affects members' evaluative orientation and results in members' moral commitment. To operationalize mortification the following items were extracted from Kanter's questionnaire:

*Has this group ever expelled a member because he or she violated a rule?

_____ yes (1)
 _____ no (3)
 _____ uncertain (2)

*Has this group ever punished a member who violated a rule by removing a privilege of membership?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

Are prospective members or new members given instruction in group doctrine or rules?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

Does this group have a formal probation period during which a prospective member can participate in the group to a limited extent without the rights of full membership (include recruit training)?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

Are new members of this group given books or pamphlets to read or study?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

Are new members in this group segregated in any way from old members? (For example, does this group make any distinction between old and new members in terms of different titles, ranks, or residences, or in the assignment of group tasks?)

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

Has this group ever used public denouncement as a means of punishing a member who violated a rule? (In other words, has a member's misconduct ever been publicly brought to the attention of the membership, such as at a group meeting?)

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

The alpha for these items was .81. However, the deletion of the items concerning expulsion and the removal of privileges for rule violations produced an alpha equal to .92. The sum of the means for the adjusted scale consisting of five items served as the measure for mortification.

Transcendence. According to Kanter, transcendence is a group mechanism which attaches members to the group and,

like mortification promotes a positive moral commitment from group members. To scale transcendence the following items were taken from Kanter's questionnaire:

When making group decisions some groups stress values while other groups emphasize practical concerns. In this group, how important are group values (as opposed to practical matters) in making group decisions?

- _____ very important (5)
- _____ important (4)
- _____ not very important (2)
- _____ not important at all (1)
- _____ uncertain (3)

*If the top leaders of this group made a decision which was unpopular among the membership, would the leaders be required to justify or explain the reasons for their decision before the membership would obey?

- _____ yes (3)
- _____ no (1)
- _____ uncertain (2)

Are recruits or new members expected to take any vows, agree to any changes in behavior, or exhibit any behavior modification?

- _____ yes (3)
- _____ no (1)
- _____ uncertain (2)

Does this group ever reject a prospective member as unacceptable?

- _____ yes (3)
- _____ no (1)
- _____ uncertain

Does this group have a formal procedure for choosing new members?

- _____ yes (3)
- _____ no (1)
- _____ uncertain (2)

Are the leaders of this group addressed differently from the membership or is their name usually prefaced with a special title (for example, elder, general, president, father)?

_____ yes (3)
 _____ no (1)
 _____ uncertain (2)

The alpha coefficient for these items was .80. With the deletion of the item related to leaders having to justify unpopular decisions to the membership the alpha was .81, a very small improvement. Examination of the adjusted scale revealed no further improvement in reliability was indicated. The sum of the means of the adjusted scale served as the index for transcendence.

Table 6 presents the mean, standard deviation, range, and the minimum and maximum score for each of the seven variables examined in this study.

Data Analytic Techniques

Correlation. A number of data analytic techniques were employed in this study. One was Pearson's Product Moment Correlation. Pearson's r is a measure of association appropriate for evaluating relationships between interval level variables; it "measures the amount of spread about the linear least squares equation" (Elalock, 1972: 376).

Table 6
SUMMARY OF VARIABLE STATISTICS

Variable	Mean	Standard Deviation	Range	Minimum	Maximum
Cohesion	54.013	22.250	84.66	10.000	94.660
Sacrifice	64.738	21.579	68.90	27.400	96.300
Investment	2.307	.491	1.40	1.600	3.000
Renunciation	10.950	2.116	8.00	5.400	13.400
Communion	9.957	2.302	5.80	6.000	11.800
Mortification	13.203	2.248	8.40	6.400	14.800
Transcendence	14.253	2.135	7.20	9.600	16.800

Pearson's correlation coefficient was used as a tool in analyzing reliability and scale development and as an aid in eliminating complications in the regression model.

Multiple Regression. The major purpose of this research was to analyze the contributions of the independent variables in explaining variance in group cohesion. In addition to the appropriateness of multiple regression for data analysis involving both categorical and continuous variables, unlike N-way analysis of variance, regression does not require equal or proportionate cell frequencies (Kerlinger and Pedhazur, 1973: 113-114).

In evaluating the contributions of the independent variables in explaining variance in the dependent variable, the multiple regression hierarchical method for testing significance of regression coefficients was employed. (Refer to Formula 4 in Appendix A.) The hierarchical test is a method of decomposing variance based on the semi-part (also called part) correlation where the effect of one variable is removed from another and the resulting residual is correlated with the dependent variable.

The square of the part correlation is interpreted as the absolute incremental increase in explained variance due to the addition of a variable into an equation already con-

taining another independent variable. (Refer to Formula 3 in Appendix A.) The squared part correlation coefficient is used in the numerator of the formula for calculating the F statistic in tests for hierarchical decomposition of variance.

Multiple regression's hierarchical was utilized for testing the significance of predictor variables, for testing the significance of nonadditivity, and for testing deviation from linearity.

As a final note to conclude this chapter, the statistics used to analyze the data were generated by SPSS Subprograms Reliability, Condescriptive, Frequencies, Pearson Corr, and New Regression. To test hypotheses, the .05 level of significance was used as the standard for rejection.

Chapter V

PRESENTATION OF FINDINGS

Introduction

It should be clear from the preceding chapter that this research was atypical of conventional sociological research in a number of aspects: the unit of analysis was the group, the sample size ($N=30$), as well as the fact that five of the eight variables in the study were collected from panels of judges with varied and extremely small N s. In addition, in the process of analyzing the data, problems arose whose routine solutions were inappropriate given some aspect of the data. Most frequently, the sample size restricted the options in handling problems.

The sections which follow present the study findings in terms of two analytical stages. The first section addresses some of the problems which were encountered in building the models and the decision making process involved in their solutions. The second section presents the major findings of the study in terms of the analyses of the two models examined: Model I which examined the power of Kanter's variables in predicting cohesion and Model II which introduced type of organization into the regression equation.

Building the Model

The first model tested in this study involved the contribution of the independent variables derived from Kanter's work in explaining cohesion. Prior to the actual testing of the model, zero-order correlations were inspected in an attempt to detect potential complications in the model. Table 7 presents the zero-order correlations based on Pearson's product moment correlation coefficient.

Inspection of the zero-order correlations revealed high correlations among the independent variables, specifically between sacrifice and investment ($r=.75$), investment and communion ($r=.72$), renunciation and mortification ($r=.80$), renunciation and transcendence ($r=.76$), communion and mortification ($r=.83$), and mortification and transcendence ($r=.71$).

In addition to the problem of multicollinearity, there was evidence that a model including all six of the independent variables would have been contaminated with the inclusion of variables not significantly related to the dependent variable. In this instance neither renunciation nor transcendence was significantly related to cohesion.

In determining how to handle these problems, Blalock (1972: 502-503) suggested systematic steps which should

TABLE 7

ZERO-ORDER CORRELATIONS AND SIGNIFICANCE LEVELS

Bivariate Relationships	Zero Order Correlations	Level of Significance
Cohesion with:		
Sacrifice	.859	.000*
Investment	.738	.000*
Renunciation	.122	.260
Communion	.499	.003
Mortification	.495	.003
Transcendence	.114	.275
Sacrifice with:		
Investment	.751	.000*
Renunciation	.292	.060
Communion	.637	.000*
Mortification	.582	.000*
Transcendence	.398	.015
Investment with:		
Renunciation	.141	.230
Communion	.721	.000*
Mortification	.585	.000*
Transcendence	.229	.112
Renunciation with:		
Communion	.545	.001
Mortification	.799	.000*
Transcendence	.757	.000*
Communion with:		
Mortification	.831	.000*
Transcendence	.555	.001
Mortification with:		
Transcendence	.711	.000*

*Significant beyond the .001 level

taken in order to avoid the kinds of unnecessary complications mentioned above. According to him, "the basic strategy of analysis . . . is to begin by seeing how many [variables] can be eliminated right away" (1972: 503). Specifically, this means deleting variables which have marginal explanatory power as indicated by negligible zero-order correlations with the dependent variable. In addition, given the small size of the sample and the large number of variables, some criterion for eliminating variables was essential.

An examination of the zero-order correlations between the dependent variable, cohesion, and the independent variables and their corresponding significant levels resulted in the exclusion of renunciation ($r=.12$) and transcendence ($r=.11$) from the model.

The consequence of multicollinearity is that it is difficult, if not impossible, to separate the component effects of the independent variables in order to determine their respective contributions to explained variance (Darlington, 1968). There are three standard solutions to colinearity: (1) use only one of the variables in the highly correlated set (Nie, et al, 1975: 341); (2) combine the variables to create a new composite variable (Nie, et al., 1975: 341;

Blalock, 1972: 503), or (3) treat the correlated variables as a block and examine the effects of the entire block using the multiple partial correlation coefficient (Blalock, 1972: 503).

For the current research the decision was made to combine the components of communion and mortification into a single variable. Not only was the correlation between these variables extremely high ($r=.83$), the correlations between each of these with cohesion were virtually identical ($r=.499$ and $.495$). The new composite variable was created by means of simple summation of the scores for items in both scales. The combination of these into a new variable was also justified on the basis of what appears to be a common underlying dimension: submechanisms which enhance conformity.

In terms of the high correlation between sacrifice and investment ($r=.75$), there were two reasons for not combining these into a single scale. First of all, although there is no hard and fast rule concerning the point at which collinearity is not problematic, there is agreement that it is problematic if the correlations are in the range of .80 to 1.0, a range in which the correlation between sacrifice and investment did not fall. Secondly, the zero order correlations of each of these variables with cohesion ($r=.86$ and

$r=.74$) indicated a difference between them in their impact on cohesion. Although highly correlated, the research interest was in examining whether investment contributed significantly to explained variance over and above that explained by sacrifice.

As a result of these basic strategies to eliminate complications in the regression equation, the first model tested included the dependent variable, cohesion, and three independent variables, sacrifice, investment, and the new composite variable, conformity.

Testing Model I

Although Kanter's work does not suggest a causal relationship among her concepts, the reader will recall that the scale used in the current study to measure sacrifice did not address specific sacrifices, but rather involved the idea of sacrifice with meaning, or disciplined freedom. Given the nature of the concept as it was used in this study, utilization of the hierarchical method for testing the significance of additional contributions to explained variance was justified. In other words, given the scaling of sacrifice as disciplined freedom, it is likely that sacrifice has causal priority to investment and conformity.

Using SPSS New Regression's forward inclusion procedure which enters variables into the equation one at a time on the basis of their contributions to variance explained, sacrifice was the only significant variable. In other words, with sacrifice in the equation, the additional contributions of investment and conformity were not statistically significant. With 1 and 26 degrees of freedom the F values for investment and conformity were 2.236 and .139, respectively, not significant at the .05 level.

The regression of cohesion on sacrifice produced a correlation .86, an r square equal to .74, and an F value of 78.79 which, with 1 and 28 degrees of freedom, was significant beyond the .001 level. In other words, sacrifice explained 74 percent of the variance in cohesion.

Regression models assume linearity and additivity. As a test for deviation from linearity a new variable was created from the sacrifice variable and coded into seven categories which, in turn were created into six dummy variables. The test for curvilinearity produced an F value of 1.542397 which with 5 and 23 degrees of freedom was not statistically significant. The model was linear. (Refer to formula 5 in Appendix A.)

Testing Model II

The second purpose of this research was to examine the relationship between type of organization and cohesion controlling for the effects of Kanter's mechanisms of which only one, sacrifice, was significant.

Model II contained three variables: the dummy variable, type of organization, and the continuous variables, sacrifice and cohesion. The theoretical model tested was the relationship between type of organization and cohesion holding constant the intervening effects of sacrifice.

The zero-order correlations and significance levels for these variables are reported in Table 8. The zero-correlation between type of organization and cohesion ($r = .4650$) was statistically significant at the .005 level, thus indicating that there is a statistically significant difference between communal and formal organizations in terms of cohesion with communal organizations having higher degrees of cohesion.

However, before subjecting the model to a path analysis to determine the direct and indirect effects of type of organization on cohesion, it was necessary to test the model for additivity, an assumption of both regression and path analysis.

TABLE 8

ZERO-ORDER CORRELATIONS AND SIGNIFICANCE FOR
TYPE OF ORGANIZATION, SACRIFICE, AND COHESION

Relationship	Zero Order Correlation	Level of Significance
Type of organization and Cohesion	.4625	.005
Sacrifice and and Cohesion	.8590	.000*
Type of organization and Sacrifice	.6244	.000*

*Significant beyond the .001 level

The regression equation used to test interaction included type of organization, sacrifice, and the interaction term. The test for interaction involved testing the statistical significance of additional variance explained by the interaction term using the hierarchical method.

The test for interaction produced an F value of 10.855 which, with 1 and 26 degrees of freedom was significant at the .0028 level. Interaction between type of organization and sacrifice was statistically significant.

The interpretation of significant interaction is: there is a significant difference between formal and communal organizations in terms of the effect sacrifice has on cohesion. That is, the relationship between sacrifice and cohesion is not the same in the two types of organization. As a consequence of significant interaction and, therefore, a violation of the assumption of additivity, the model was inappropriate for path analysis; the plan of analysis had to be abandoned.

According to Kerlinger and Pedhazur (1973: 259) when interaction is significant it is necessary to: (1) calculate separate regression lines from the overall equation, (2) determine the point at which the lines intersect, (3) plot the separate regression lines, and (4) determine the

region of nonsignificance. (Refer to formulas 6 and 7 in Appendix A for the formulas for calculating the point of intersection and region of nonsignificance.)

Separate regression equations for formal and communal organizations were calculated from the overall equation. The overall equation was:

$$y' = -20.2 + .512X + 43.93 - .74X^2$$

Using the overall equation separate equations were calculated for formal and communal organizations, respectively.

$$y'(\text{Formal}) = -20.2 + 1.25X$$

$$y'(\text{Communal}) = 23.73 + .512X$$

Figure 2 is a graphic presentation of three major findings of this study. In addition to the finding that there is a strong positive linear dependence of cohesion on sacrifice, the slopes of each of the two regression lines show there is a difference between types of organization and the effect of sacrifice on cohesion: the effect on cohesion is stronger in formal organizations than in communal organizations. Specifically, in formal organizations for every unit change in sacrifice cohesion increased 1.25 units while for communal organizations cohesion changed only a half unit, .51.

Overall equation = $y' = -20.2 + 1.25X_1 + 43.93X_2 - .74X_3$

where X_1 equals sacrifice score

where X_2 equals type of organization

where X_3 equals the interaction term

$$y' \text{ (formal)} = -20.2 + 1.25X_1$$

$$y' \text{ (communal)} = 23.73 + .51X_1$$

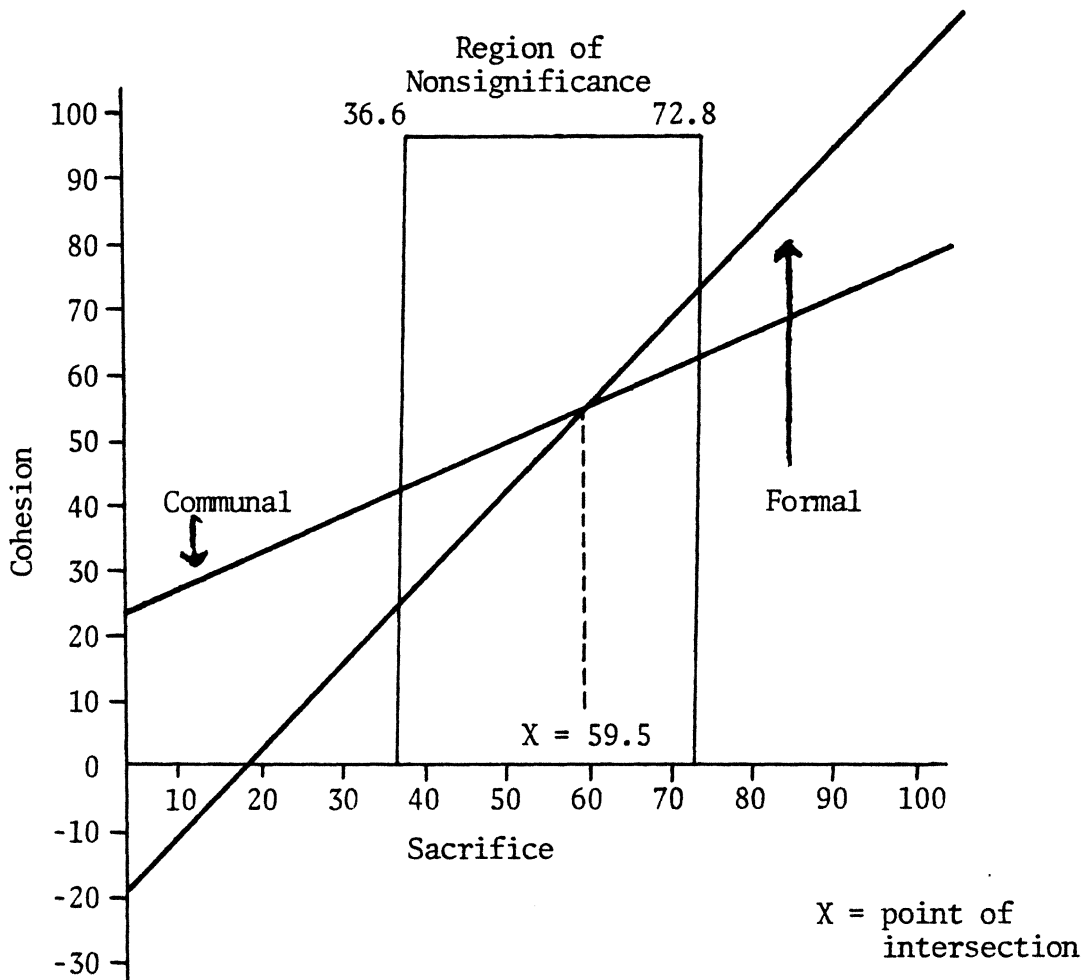


FIGURE 2

PLOT OF REGRESSION LINES AND
COHESION BY TYPE OF ORGANIZATION

The point of interaction, 59.5, indicates the point at which there is a difference between types of organization and cohesion. In other words, among groups with sacrifice scores below 59.5, communal organizations are more cohesive than formal organizations while among groups with sacrifice scores above 59.5, formal organizations are more cohesive.

Two other findings involve an examination of the region of nonsignificance. Simply put, the region of nonsignificance is the range of sacrifice scores within which there is no statistically significant difference between types of organization and cohesion. For these data the range of nonsignificance, which was calculated using the Johnson-Neyman (1936) technique, was 36.6 to 72.8. That is, among groups whose sacrifice scores are in the range of 36.6 to 72.8 there is no statistically significant difference between communal and formal organizations and cohesion. However, among groups with sacrifice scores below 36.6 and above 72.8, there is a significant difference between types of organization and cohesion: for groups with sacrifice scores below 36.6 communal organizations are more cohesive than formal organizations, while among groups with sacrifice scores above 72.8 formal organizations are more cohesive than communal organizations. However, it is important to note that for these data there were no communal organiza-

tions with sacrifice scores below 36.6. However, had there been, the regression line predicts communal organizations would have been more cohesive than formal organizations and the difference would have been significant.

Summary

In briefly summarizing this chapter, there are three major categories of findings. First of all, although the size of the sample prohibited the use of factor analysis as a means of investigating the specific nature of the relationships among the variables, the zero order correlations among the concepts and the findings of multiple regression analysis suggested that Kanter's concepts were not distinct. Also in this connection, even though Kanter conceptualized the mechanisms as three sets of pairs (sacrifice and investment, renunciation and communion, mortification and transcendence) the findings did not support the correlation of paired relationships.

The second major finding of the analysis was that sacrifice is a powerful predictor of cohesion. Seventy-four percent of the variance in cohesion was explained by sacrifice.

Finally, the introduction of type of organization into the regression model produced both unexpected and interesting results. Briefly, the findings showed: (1) the effect of sacrifice on cohesion is stronger in formal organizations than in communal organizations, (2) among groups with sacrifice scores between 36.6 and 72.8 there is no statistically significant difference between type of organization and cohesion, and (3) among groups with sacrifice scores above 72.8 formal organizations are statistically more cohesive than communal organizations, while among groups with sacrifice scores below 36.6, it can be predicted that communal organizations would be more cohesive than formal organizations.

Chapter VI

INTERPRETATION OF FINDINGS

Introduction

In this chapter the empirical findings from this research are summarized and interpreted within the framework of their theoretical implications. The first section addresses findings related to Kanter's conceptual scheme. In the second section the findings concerning the relationship between sacrifice and cohesion will be presented in light of the literature on cohesion. And finally, findings on the relationship between type of organization and cohesion will be discussed in terms of their implications for community theory.

Kanter's Conceptual Model

To reiterate the basic postulates of her Commitment Mechanisms Model, Kanter hypothesized that the presence of three sets of paired concepts increase the likelihood of positive group consequences. Although her primary interest was in providing an explanation for the process by which the three pairs of group properties affected individual commitment, these also produced positive consequences for the group.

According to Kanter, sacrifice and investment are mechanisms which detach members from alternative memberships

and attach them to the group by means of affecting individual instrumental orientations, or individual evaluations of the costs and rewards of membership. If members are required to give up something (sacrifice) and profits can be gained only through continued participation (investment), the likelihood of members making an instrumental commitment increases, and therefore, the likelihood of a positive consequence for the group, retention of members, also increases.

The second pair of mechanisms Kanter addressed was renunciation and communion which are mechanisms related to interaction. This pair promotes affective commitment by detaching members from alternative memberships (renunciation) and attaching them to the group (communion). These mechanisms increase the likelihood of cathetic commitment and, as a result, increase the likelihood of interpersonal liking within the group.

The third pair of mechanisms is related to values. As a result of mortification which detaches members from alternatives and transcendence which attaches members to the group, this pair promotes moral commitment and, therefore, the likelihood of greater group conformity.

Although the current research did not modify Kanter's model, the emphasis was different. Kanter stressed the relationship between the mechanisms and individual commitment, while the current research was interested in the relationship between group mechanisms and their consequence, cohesion. Instead of examining the specific consequence of each pair, the current research viewed these as aspects of a single group property, cohesiveness.

Subjection of Kanter's concepts to empirical analysis revealed three observations. First of all, the zero-order correlations of each of the six independent mechanisms with cohesion showed that neither renunciation nor transcendence was significantly correlated with cohesion. The null hypotheses of no relationship between the presence of renunciation and transcendence could not be rejected. However, the null hypotheses of no association between cohesion and the presence of sacrifice, investment, communion, and mortification were rejected.

In addition, the high zero-order correlations among Kanter's variables revealed that among some not only were distinctions among them vague, but also that the highest zero-order correlations were not between paired concepts. Thus, renunciation, a detaching mechanism related to inter-

action was more highly correlated with mortification, a detaching mechanism related to values ($r=.76$) than it was to its paired complement communion ($r=.56$). Likewise, communion was more highly correlated to investment ($r=.72$) and to mortification ($r=.83$). However, while the correlation between sacrifice and investment supported the paired relationship Kanter conceptualized ($r=.76$), the correlation between investment and communion was almost as high ($.72$).

The point to be stressed here is not only did the intercorrelations among Kanter's concepts indicate that the distinctions among them are vague, but also that the highest zero-order correlations for each variable in two out of the three paired relations were with variables outside of the pair. Unfortunately, the small research sample prevented the investigation of these intercorrelations using factor analysis for deciphering the components. Clearly, this is an interesting problem for future research.

The Mechanisms and Cohesion

The severe limitations of the sample size regarding the high intercorrelations among Kanter's variables restricted the options available for analyzing the data. As a result of the sample size and the number of variables, it was necessary to find some means of eliminating the number of varia-

bles in the analysis. Following Elalock's suggestion, renunciation and transcendence were excluded from the analysis on the basis of their insignificant zero-order correlations with cohesion. Next communion and mortification were combined into a single index based on their high correlation ($r = .83$), the similarity of correlations with cohesion, and on the logic that the items which made up the two scales measured a common underlying component, mechanisms which are likely to produce conformity. In addition, although sacrifice and investment were also highly correlated, the decision not to combine these into a single index was based on the measurement of sacrifice in the current study. As disciplined freedom sacrifice was viewed as a variable with hierarchical priority to investment and conformity: sacrifice affects the likelihood of investment and conformity. Likewise, given the need to reduce the number of variables, a hierarchical regression model for selecting the best predictors was desirable.

The results of the hierarchical method showed that once the contribution of sacrifice to explained variance in cohesion had been removed, the additional contributions of investment and conformity were not significant. In addition, the amount of variance explained by sacrifice was quite high ($r^2 = .74$).

This finding on the relationship between sacrifice and cohesion is consistent with a whole body of literature in the field of group dynamics both in terms of theory and research. As has already been discussed in the literature review on cohesion in Chapter Two, the theoretical underpinning which conceptualized cohesion as attraction to the group is Festinger's theory of cognitive dissonance: when membership has a price, dissonance is created and a corresponding drive to eliminate it emerges. According to the theory, one way to eliminate dissonance is to view the situation or object which created dissonance differently; that is, people reduce dissonance by finding something attractive about the situation or object.

In terms of empirical research a number of studies have found that when group membership has a price, whether it be the cost of going through a severe initiation (Aronson and Mills, 1959) or the receipt of a small reward relative to the effort expended (Aronson, 1961; Festinger and Carlsmith, 1959), people are more attracted to the group or more likely to perceive the object or situation as more attractive than those who receive large rewards or do not make sacrifices. The study finding that sacrifice is a powerful predictor of cohesion is consistent with both theory and empirical research.

Although investment did not contribute significantly to explained variance once sacrifice was already in the model, it is interesting to point out that investment (measured as the practice of not reimbursing members who withdraw for labor, services, property, or financial contributions) had a strong zero-order correlation with cohesion ($r=.74$, r square $=.55$). This finding is mentioned since it supports Becker's (1960) sidebet hypothesis regarding investment in an organization and the individual's willness to remain. However, to repeat, once sacrifice was entered into the equation, investment did not significantly contribute to explained variance.

Type of Organization, Sacrifice, and Cohesion

To briefly summarize the study findings on the relationship between type of organization, sacrifice, and cohesion, it was found that there was significant interaction in the model, meaning there was a significant difference between the types of organization in the effect of sacrifice on cohesion: the regression lines for each of the organizations were different.

The plot of the separate regression lines revealed not only a positive linear relationship between sacrifice and cohesion for each organizational type, but also that the

effect of sacrifice on cohesion was much greater in formal organizations. For every unit change in sacrifice cohesion increased 1.25 units for formal organizations and .51 unit for communal organizations.

The calculation of the point of intersection and the plot of the regression lines showed that groups with sacrifice scores below 59.5 communal organizations were more cohesive than formal organizations while among groups with sacrifice scores above 59.5 formal organizations were more cohesive.

Calculation of the Johnson-Neyman technique for determining the region of nonsignificance showed that for groups whose sacrifice scores were between 36.6 and 72.8 there was no statistically significant difference between types of organization and cohesion. In other words, the original relationship between type of organization and cohesion is interpreted through the mechanism of sacrifice.

The region of nonsignificance has two corresponding regions of significance: groups with sacrifice scores below 36.6 and those with scores above 72.8. Discussion of the lower range of statistical significance must by necessity be hypothetical since there were no communal organizations in the sample with sacrifice scores below 36.6. However, based

on the plot of the regression line for communal organizations, it can be predicted that if there had been communal organizations with sacrifice scores below 36.6 these groups would have been more cohesive than formal organizations with sacrifice scores below 36.6. It is interesting to note that two communal organizations with sacrifice scores below 36.6 were excluded from the analysis because judges for independent verification could not be located. Had these two communal organizations been included they would have fallen almost directly on the regression line as predicted.

At the upper region of significance (sacrifice scores above 72.8) there was also statistically significant difference between types of organization and cohesion. However, in this region formal organizations were more cohesive than communal organizations.

In an attempt to explain the finding of the differential affect of sacrifice on cohesion in the two types of organizations, one possible explanation is the difference in organizations in terms of the members' perceptions of sacrifice. Although this writer can go no further than to suggest an explanation based on inferences from existing theory and past empirical research, perhaps the explanation

is rooted in the context in which sacrifice as disciplined freedom is and is not expected. By means of illustration, it seems logical that members of communal organizations would not be as likely to perceive sacrifice as something which creates dissonance simply because sacrifice is more likely to be an expected aspect of communal life. In terms of examples from this study, monks, communitarians, and members of Greek social organizations enter those groups with the knowledge that not only are sacrifices expected, they are required. Likewise, family members may make tremendous sacrifices giving relatively little thought to it because it is simply something one does as a member of a family.

On the other hand, sacrifice in a formal organization would more likely generate dissonance since it is within this type of organizational context that sacrifice above a certain degree is atypical of the organizational type. This is sacrifice out of context and, therefore, members of formal organizations would be more likely to experience dissonance which requires reduction by finding something attractive about the situation, object, or group.

At this point it is important to mention once again that sacrifice as it was conceptualized in this study is more than merely giving up something as the price of member-

ship. The concept includes the element of sacrifice with meaning; it is sacrifice as discipline within an ideological framework Hillery, et al. called disciplined freedom (i.e., freedom as sacrifice, sharing, making concessions, etc.). With this ideological element in mind, it is interesting to note that groups in the sample which are typically perceived as highly disciplined scored low on both sacrifice as freedom and cohesion. For example, military life is disciplined yet the medical corps, women's army group, and the military police subsamples scored low on sacrifice and cohesion.

In addition, these study findings also have implications for the field of community theory. The reader will recall from Chapter Two that literature in the field of community theory has implied that there is an inherent difference between communal and formal organizations in terms of sentiment, or what has been called cohesion in the current study. However, Schmalenbach presented an alternative viewpoint by maintaining there is a distinction between community and communion, the latter defined as a consciously created collective emotional experience. Utilizing Schmalenbach's distinction, Zablocki (1974) explained the Bruderhof's collective religious experience of joy by stating there was a conscious effort on the part of the Bruderhof not only to produce the collective experience, but also that

they were able to harness the experience by providing an ideological framework within which to interpret it. In addition, Hunter's (1975) study of a local neighborhood suggested that the residents' "sense of community" was enhanced by what he called "a partial ideology" and participation in a formal organization.

The interface of this literature and the current research suggests that sacrifice measured as disciplined freedom provides the framework within which to interpret the costs of group membership and that the affect of sacrifice on cohesion is greater when it is found in an atypical context. Not only is "sense of community and the phenomenon of communal organizations not necessarily related," as Hillery (1972: 538) stated, but the findings of this study indicate that at high levels of sacrifice formal organizations are significantly more cohesive than communal organizations. In the terminology of the elaboration paradigm, the study findings indicate that the assumption of community sentiment must be specified at different levels of sacrifice. Among groups with low degrees of sacrifice, it can be predicted that communal organizations are more cohesive than formal organizations. Among groups with moderate degrees of sacrifice, there is no significant difference between organizations and cohesion. However, among groups with high

degrees of sacrifice, the assumption that communal organizations are more cohesive does not hold; formal organizations were found to be more cohesive than communal organizations.

Chapter VII
ISSUES AND CONCLUSIONS

Introduction

This research endeavor was designed with two related purposes in mind. First of all, one goal was to examine the effects of a number of independent group variables on group cohesiveness. The importance of this research task lay in the fact that, to this researcher's knowledge, no previous research has examined the effects of a number of independent variables using a variety of different kinds of groups. In addition, there are few studies which have examined cohesiveness at the group level of analysis. A second purpose of this study was to test the assumption reflected in the literature that community implies sentiment, an assumption which, until Hillery (1972) criticized it, was not acknowledged.

In this sense, this study was original in that it undertook the task of investigating two critical and basic areas within the discipline. However, the complexity of the research problem was not initially fully recognized. Problems arose whose typical solutions were inappropriate given some aspect of the data, most frequently the size of the sample. Not only were there no clearcut solutions, but in some cases consultations with specialists revealed a lack of

consensus concerning the appropriate course of action. Likewise, as a result of the conspicuous lack of discussion of problems in other research, finding guidelines was often akin to the perennial search for the needle in the haystack.

The choice of solutions to some of the research problems have already been discussed within the context of the chapters on data analysis and interpretation. Other problems and issues which were raised, some without answers, will be briefly presented in this chapter.

Problems Encountered in Data Analysis

Measurement. Decisions concerning how to measure the variables were based on consideration of the nature of the data. Regarding measurement of variables derived from panels of judges, the decision of measurement was rather straightforward. Specifically, the extremely small and varied sizes of the panels was the basis of the decision to use the sums of means as measures. In the content of a footnote, Kerlinger (1973: 152) stated:

Percentages should not be used with small numbers. The reason . . . is that relatively larger percentages give a sense of accuracy not really present in the data.

In addition, there was concern that the use of percentages as measures for variables derived from data gathered from

judges would have produced erratic variation. For example, if all but one judge on the Drug Rehabilitation panel had agreed to an item the percentage agreement would be 85.7 percent (N=7), while for the Martin House panel one disagreement would produce a percentage agreement of 66.6 percent (N=3). As a result of Kerlinger's warning and the erratic variation of scores from small and varied panel sizes, the decision was made to use the sums of means for data gathered from panels of judges. However, subsequent analysis showed that use of percentage agreement produced the same results as the measurements based on the sums of means.

The decision concerning the measurement of variables derived from groups in Hillery's Organization File (cohesion and sacrifice) was more complex than for variables derived from judges. Specifically, the response categories for cohesion and sacrifice were designed with Likert-type categories which included a category for "don't know" or "uncertain" and assigned a middle range, neutral value. However, from an examination of the frequency distributions two observations were made. First, although a category for "don't know" was included, some groups (formal organizations) had a substantial percentage of missing data. When the don't know category was recoded and defined as missing,

the percentage of missing data increased dramatically with eleven groups having between 25 and 45 percent missing data on cohesion and eighteen groups having between 25 and 80 percent missing data on sacrifice. Clearly, the neutral category of "don't know" could not be excluded given the extremely high percentage of missing data.

Further inspection of the frequency distributions also indicated that the neutral category "don't know" was inflating the means of formal organizations and, therefore, causing the range of means to be narrow. Since exclusion of the don't know category produced extremely high percentages of missing data and since its inclusion inflated the means of formal organizations, one way of handling these problems was to use the percentage agreement to items defined as high cohesion and sacrifice. Not only did this solve the problem of missing data, it allowed for the examination of scale reliability based on the same population.

Scaling. Another problem encountered in this research dealt with scaling and the reliability of the variables derived from Kanter's model. However, it should be stressed that Kanter explicitly stated that her primary interest was not analytical purity and cause, but rather function. As such, she stated,

Certain strategies [submechanisms] that appear quite different. . . may be functionally alternative. . . while more than one strategy may serve the same function, the same strategy might have more than one functional consequence (1975: 250).

As a consequence of her interest in function rather than in cause, Kanter not only listed some submechanisms under more than one concept, her hypotheses were different than those in the current study. She hypothesized that as the number of submechanisms increased, the likelihood of positive consequences for the group increased.

The original intent of this study was to examine Kanter's hypotheses regarding the number of submechanisms. However, probably as a result of the differences in research samples (Kanter's consisting of only utopian communities), this strategy had to be abandoned. The use of the number of submechanisms produced problems in the analysis in that the submechanisms under a given concept were cancelling out each other. For example, if a concept had four submechanisms, Group A and Group B may have had two of the submechanisms, but not necessarily the same two. Hypotheses based on number of submechanisms had to be abandoned in favor of hypotheses based on clusters of submechanisms which, based on reliability tests, were related.

Issues

Interpretation of the study findings must be accompanied by a word of caution. As with the findings from any research, care must be taken concerning what the findings mean. The significance of the study findings for community theory necessitates the acknowledgement of two points. First of all, the inferences from the literature which generated the hypothesis concerning type of organization and cohesion as concepts which reflect "community as sentiment" were implicit. Furthermore, like community, sentiment is a loaded term; it is little more than a label given to an impression from the literature about the quality of communal relations. Sentiment is not a concept explicitly used in community literature, much less conceptually and operationally defined. As a result of the confusion and vagueness generated by the terms community and sentiment, it was necessary to use concepts which were more precisely defined as indicators of the phenomenon of community as sentiment. The interpretation of the study findings within the context of community sentiment, therefore, depends on the validity of the inference that cohesion is a measure of sentiment.

Secondly, it is important to mention that the data on type of organization was not subjected to independent verification from an outside source. Therefore, the findings on

type of organization and cohesion are only as good as the validity of the classification of specific groups into formal and communal categories. Although the data were examined for face validity, insufficient knowledge concerning specific groups in the sample hindered confident confirmation that the classification was correct. This is not to say that the classification is suspect, but rather to acknowledge that, as with any secondary data source, confirmation of its validity was superficial.

In this same vein, another problem encountered in this research dealt with the difficulty of using the characteristic of specific goal as the criterion for classifying groups. As Gottschalk (1975) has stated, the criterion of primacy given to specific goal was "difficult to reconcile with empirical reality." Although lack of sufficient knowledge about the groups was the major handicap in examining validity, in a few cases the sole criterion of primacy to a specific goal was not clearcut.

Consideration was given to the possible use of other classification schemes such as Gordon and Babchuk's (1959) scheme for classifying voluntary associations on the basis of expressive and instrumental goals, and to Etzioni's (1961) classification of complex organizations based on the

predominance of the type of power. However, each attempt at classification resulted in borderline or deviant cases which could not be neatly pigeonholed.

The decision to proceed with the analysis using Hillery's classification was based on an elaboration of Hillery's typology by Gottschalk (1975). Specifically, Gottschalk suggested that the focus of the analysis should be shifted away from specific goal as measurable output toward the orientation of the organization to a specific goal and the view that the organizations' orientation is relative and not absolute. These refinements did not alter the significance of the specific goal criterion, but rather placed emphasis on the function and structure of the organization (Gottschalk, 1975: 95). This change in orientation alleviated much of the difficulty in applying Hillery's typology to actual research.

The mention of the problem of classifying borderline and deviant cases in the application of any typology is not a criticism, but rather an expression of appreciation of the difficulty involved in both developing and using them.

The most disturbing problem encountered in this research involved the question of how to measure a group variable derived from individual responses. Which is let-

ter, the mean or the percentage agreement? Is either of these a satisfactory measure of "groupness"? If we are to believe that Durkheim was correct when he stated that the whole is more than the sum of the parts, then clearly measures which are little more than mathematical manipulations of the parts leaves a great deal to be desired.

Selvin and Hagstrom (1963) made the distinction between group variables which are derived from individual responses and those which are characteristic of groups, such as number of formal rules, type of role structure, and so forth. They called the latter integral variables. The variables in this study technically should have been integral variables, yet because of the number of groups involved and the research situation, it was impossible to conduct participant observation or to use a more objective source of gathering data in order to determine the presence or absence of group mechanisms. The best alternative was to solicit information from informants or judges. Yet, since no group or panel of judges had 100 percent agreement on every item, questions were raised about the measures. Does lack of perfect agreement reflect the unreliability of a particular judge? Does it reflect the unreliability of an item in a specific group context? Or does it reflect the extent to which either members are knowledgeable about the group (thus indicating the

extent to which participation and involvement are important to the group) or the degree to which the characteristic is an important property?

Another issue related to the measurement of group variables is the theoretical explanations of the relationships among group variables. Specifically, in terms of this study, theory for explaining group cohesion is psychological reductionism, i.e., Festinger's theory of cognitive dissonance, Thibaut and Kelly's concepts of comparison levels, alternatives, and expected outcomes, Cartwright's synopsis of the literature which views cohesion as the interaction between group properties and individual motives. Likewise, although Kanter's model describes the relationship between group mechanisms and their group consequences, the explanatory link between them is individual commitment. In fact, it is interesting to note that except for the claim that cohesion is a group property, there is little, if any, difference between cohesion and commitment either in terms of conceptualization, operationalization, and their applications in research.

The mention of these issues and questions has been not only to stress the need for greater conceptual clarification, sociological theory, and measurement, but also to place the

complexity of the current research problem and its findings within the context of broader issues within the discipline. By acknowledging the problems encountered and by placing them within the context of broader issues it is hoped that open discussion of these will not be viewed merely as an admission of ignorance, but that it will encourage dialogue.

REFERENCES

- Aronson, E.
1961 "The effect of effort on the attractiveness of rewarded and unrewarded stimuli." *Journal of Abnormal and Social Psychology* 63: 375-80.
- Aronson, E., and J. Mills
1959 "Effect of severity of initiation on liking for a group." *Journal of Abnormal and Social Psychology* 59: 177-181.
- Axelrod, M.
1956 "Urban structure and social participation." *American Sociological Review* 21: 13-18.
- Back, K.
1951 "The exertion of influence through social communication." *Journal of Abnormal and Social Psychology* 46: 9-24.
- Becker, H.
1960 "Notes on the concept of commitment." *American Journal of Sociology* 66: 32-40.
- Bell, W., and M. Boat
1957 "Urban neighborhoods and informal social relations." *American Journal of Sociology* 62: 391-98.
- Blalock, H. M.
1972 *Social Statistics*. New York: McGraw-Hill.
- Bovard, E.
1951 "Group structure and perception." *Journal of Abnormal and Social Psychology* 46: 389-405.
- Cartwright, D.
1968 "The nature of group cohesiveness." In D. Cartwright and A. Zander, eds. *Group Dynamics: Research and Theory*, 3rd edition. New York: Harper and Row.
- Converse, P. and A. Campbell
1968 "Political standards in secondary groups." In D. Cartwright and A. Zander, eds. *Group Dynamics: Research and Theory*, 3rd edition. New York: Harper and Row.

- Darlington, R.
1968 "Multiple regression." Psychological Bulletin, pp. 161-182.
- Dimock, H.
1941 Recovering the Adolescent. New York: Association Press.
- Effrat, M.P.
1974 The Community: Approaches and Applications. New York: Free Press.
- Etzioni, A.
1961 A Comparative Analysis of Complex Organizations: On Power, Involvement, and their Correlates. New York: Free Press.
- Festinger, L., S. Schachter, and K. Back
1950 Social Pressures in Informal Groups. New York: Harper. Also condensed in E. Cartwright and A. Zander, eds. Group Dynamics: Research and Theory. New York: Harper and Row, 1968.
- Festinger, L., and H. Gerard, B. Hymovitch, H. Kelley, and B. Raven
1952 "The influence process in the presence of extreme deviates." Human Relations 5: 327-46.
- Festinger, L., L. Pepitone, and T. Newcomb
1952 "Some consequences of deindividuation in a group." Journal of Abnormal and Social Psychology 47: 382-89.
- Festinger, L.
1954 "A theory of social comparison processes." Human Relations 7: 117-140.
- Festinger, L., L. Riecken, and S. Schachter
1956 When Prophecy Fails. Minneapolis: University of Minnesota Press.
- Festinger, L.
1957 A Theory of Cognitive Dissonance. Stanford, California: Stanford University Press.
- Festinger, L., and J. Carlsmith
1959 "Cognitive consequences of forced compliance." Journal of Abnormal and Social Psychology 58: 203-10.

- Gans, H. J.
1968 "Urbanism and suburbanism as ways of life: a re-evaluation of definitions." In H. J. Gans, People and Plans: Essays on Urban Problems and Solutions. New York: Basic Books.
- Gerard, H., and J. Rabbie
1961 "Fear and social comparison." Journal of Abnormal and Social Psychology 62: 586-592.
- Gordon, C. W., and N. Balchuk
1959 "A typology of voluntary associations." American Sociological Review 24: 22-29.
- Gottshalk, S.
1975 Communities and Alternatives: An Exploration of the Limits of Planning. New York: John Wiley and Sons.
- Hillery, G. A.
1955 "Definitions of community: areas of agreement." Rural Sociology 20: 111-23.
- Hillery, G. A.
1968 Communal Organizations: A Study of Local Societies. Chicago: The University of Chicago Press.
- Hillery, G. A.
1972 "Selected issues in community theory." Rural Sociology 37: 534-52.
- Hillery, G. A., C. J. Dudley, and P. C. Morrow
1977 "Toward a sociology of freedom." Social Forces 55: 685-700.
- Holsti, O. R.
1969 Content Analysis for the Social Sciences and Humanities. Reading, Massachusetts: Addison-Wesley Publishing Company.
- Homans, G. C.
1950 The Human Group. New York: Harcourt, Brace, and World, Inc.
- Hunter, A.
1975 "The loss of community: an empirical test through replication." American Sociological Review 40: 537-52.

- Jackson, J. M.
1959 "Reference group processes in a formal organization." *Sociometry* 22: 307-27.
- Jackson, P. O., and J. Neyman
1936 "Tests of certain linear hypotheses and their application to some educational problems." *Statistical Research Memoirs* 1: 57-93.
- Kanter, R. M.
1972 *Commitment and Community: Communes and Utopias in Sociological Perspective.* Cambridge, Massachusetts: Harvard University Press.
- Kasarda, J., and M. Janowitz
1974 "Community attachment in mass society." *American Sociological Review* 39: 328-39.
- Kerlinger, F. N., and E. J. Pedhazur
1973a *Multiple Regression in Behavioral Research.* New York: Holt, Rinehart, and Winston, Inc.
- Kerlinger, F. N.
1973b *Foundations of Behavioral Research.* New York: Holt, Rinehart, and Winston, Inc.
- Kornhauser, W.
1968 "Mass society." In D. L. Sills, ed. *International Encyclopedia of the Social Sciences.* New York: The Macmillan Company and the Free Press.
- Mann, F., and H. Baumgartel
1952 *Absences and Employee Attitudes in an Electric Power Company.* Ann Arbor, Michigan: Institute for Social Research.
- Nie, N. H., and C. Hull, et al.
1975 *Statistical Package for the Social Sciences.* New York: McGraw-Hill.
- Palen, J. J.
1975 *The Urban World.* New York: McGraw-Hill.
- Preston, M. G., and R. K. Heintz
1949 "Effects of participatory versus supervisory leadership on group judgment." *Journal of Abnormal and Social Psychology* 44: 345-55.

- Redfield, R.
1941 The Folk Culture of Yucatan. The University of Chicago Press.
- Schachter, S.
1951 "Deviation, rejection, and communication." Journal of Abnormal and Social Psychology 46: 190-207.
- Schachter, S., and N. Ellertson, D. McBride, and E. Gregory
1951 An experimental study of cohesiveness and productivity." Human Relations 4: 229-38. Also in D. Cartwright and A. Zander, eds. Group Dynamics: Research and Theory. 3rd edition. New York: Harper and Row.
- Schachter, S.
1959 The Psychology of Affiliation: Experimental Studies of the Sources of Gregariousness. Stanford, California: Stanford University Press.
- Schachter, S.
1968 "Cohesion, social." In D. L. Sills, ed. The International Encyclopedia of the Social Sciences.
- Schmalenbach, H.
1961 "The sociological category of communion." In T. Parsons, ed. Theories of Society. New York: Free Press.
- Seashore, S.
1954 Group Cohesiveness in the Industrial Work Group. Ann Arbor, Michigan: Institute for Social Research.
- Selvin, H. C., and W. O. Hagstrom
1963 "The empirical classification of formal groups." American Sociological Review 28: 399-411.
- Sennett, R.
1969 Classic Essays on the Culture of Cities. New York: Appleton.
- Simmel, G.
1950a "The metropolis and mental life." In K. H. Wolff, ed. The Sociology of Georg Simmel. New York: Free Press.

- Simmel, G.
1950b "The secret Society." In K. H. Wolff, ed.
The Sociology of Georg Simmel. New York:
Free Press.
- Simmel, G.
1971 "The metropolis and mental life." In D. N.
Levine, ed. Georg Simmel on Individuality and
Social Forms. Chicago: University of Chicago
Press.
- Shaw, M.
1971 Group Dynamics: The Psychology of Small Group
Behavior. New York: McGraw-Hill.
- Thibaut, J. W., and H. H. Kelley
1959 The Social Psychology of Groups. New York:
John Wiley and Sons.
- Toennies, F.
1957 Community and Society. New York: Harper and
Row.
- Tomeh, A. K.
1967 "Informal participation in a metropolitan com-
munity." Sociological Quarterly 8: 85-102.
- Wirth, L.
1940 "Ideological aspects of social disorganiza-
tion." American Sociological Review 5:
472-82.
- White, R., and R. Lippitt
1968 "Leadership behavior and member reaction in
three 'social climates'." In D. Cartwright
and A. Zander, eds. Group Dynamics: Research
and Theory. 3rd edition. New York: Harper
and Row.
- Whyte, W. F.
1943 Street Corner Society: The Structure of an
Italian Slum. Chicago: University of Chicago
Press.
- Zablocki, B.
1973 The Joyful Community. Baltimore, Maryland:
Penguin Books, Inc.

APPENDIX A

Formula 1: Composite Reliability

$$\text{composite reliability} = \frac{N (\text{average interjudge agreement})}{N + [(N-1)] (\text{average interjudge agreement})}$$

where N equals the number of judges.

To derive the average interjudge agreement, the percentage of agreement for each pair of judges in a panel was calculated (number of agreements per pair divided by the number of decisions (items)). These were then summed and divided by the number of judges in the panel.

Formula 2: Cronbach's Alpha Reliability Coefficient

$$\text{alpha} = \left(\frac{N}{N-1} \right) \left(1 - \frac{V_i}{V_t} \right)$$

where V_i equals variance of an item

V_t equals variance of scores

N equals number of parts (items)

Formula 3: Part Correlation

$$\text{part correlation} = \frac{r_{y1} - (r_{y2})(r_{y12})}{1 - r_{12}^2}$$

Formula 4: F Statistic for Hierarchical Decomposition Method

To test variable one:

$$4a) \quad F = \frac{r^2_{y1}/1}{(1-R^2_{y.12\dots k}) / (N-K-1)}$$

To test variable two:

4b)

$$F = \frac{r^2_{y(2.1)}/1}{(1-R^2_{y.12\dots k}) / (N-K-1)}$$

To test variable three:

4c)

$$F = \frac{r^2_{y(3.12)}/1}{(1-R^2_{y.12\dots k}) / (N-K-1)}$$

Subsequent variables are tested in the same manner.

(The numerator for formulas 4a, 4b, 4c is the r square change on SPSS computer program output.)

degrees of freedom = 1 and (N-K-1)

where N = number of cases

K = number of independent variables

Formula 5: Test for Deviation from Linearity

$$F = \frac{(R^2 \text{ with original and dummy variables} - R^2 \text{ with original variable})/k}{(1-R^2 \text{ with original and dummy variables}) / (N-K-1)}$$

where K = number of dummy variables

N = number of cases

degrees of freedom = (K-1) and (N-K-1)

Formula 6: Point of Intersection

$$\text{point of intersection} = \frac{a_1 - a_2}{b_2 - b_1}$$

where a is the intercept term for each group and b is the slope of the line for each group.

Formula 7: Region of Nonsignificance

$$\text{region of nonsignificance} = \frac{-B \pm \sqrt{B^2 - AC}}{A}$$

$$\text{where } A = \frac{-F_{\alpha}}{N-4} (SS_{\text{res}}) \left(\frac{1}{\Sigma x_1^2} + \frac{1}{\Sigma x_2^2} \right) + (b_1 - b_2)^2$$

$$\text{where } B = \frac{F_{\alpha}}{N-4} (SS_{\text{res}}) \left(\frac{\bar{X}_1}{\Sigma x_1^2} + \frac{\bar{X}_2}{\Sigma x_2^2} \right) + (a_1 - a_2) (b_1 - b_2)$$

$$\text{where } C = \frac{-F_{\alpha}}{N-4} (SS_{\text{res}}) \left(\frac{N}{N_1 N_2} + \frac{\bar{X}_1^2}{\Sigma x_1^2} + \frac{\bar{X}_2^2}{\Sigma x_2^2} \right) + (a_1 - a_2)^2$$

F_{α} equals the tabled F ratio with 1 and $N - 4$ degrees of freedom

N equals the total number of cases

N_1 and N_2 equal the number of cases for each type of organization

SS_{res} equals the residual sums of squares for the overall equation

Σx_1^2 and Σx_2^2 equal the sums of squares of the continuous variable from separate regression analysis

\bar{X}_1 and \bar{X}_2 equal the means of the continuous variable for each group

b_1 and b_2 equal the regression coefficients for each group

a_1 and a_2 equal the intercept terms of the regression equation for each group

**The vita has been removed from
the scanned document**

GROUP MECHANISMS AND GROUP COHESION: AN EXAMINATION OF THE
EFFECTS OF GROUP PROPERTIES ON COHESIVENESS

(ABSTRACT)

by

Susan Smith Twaddle

Cohesion is a critical area of investigation in the analysis of groups in that at least a minimum amount of cohesion is necessary for group formation and group elaboration. This research project was designed with two related purposes in mind. One purpose was to investigate the effects of a number of independent variables derived from the work of Kanter (1972) on group cohesion. The first model examined the effects of sacrifice, investment, renunciation, mortification, and transcendence on cohesion.

On the basis of the results of the first model, a second model was tested in which the variables from the first model in conjunction with an additional independent variable, type of organization, was tested. Regarding the significance of the second model, Hillery (1972) has criticized the field of community theory by stating that there has been a confusion between community as sentiment and community as a human group. Using cohesion as a measure of sentiment, and defining community as communal organizations, the second

purpose of this study was to examine the relationship between type of organization and cohesion.

The first major finding of this study was that sacrifice is a powerful predictor of group cohesion: it explained 74 percent of the variance in group cohesion. With the introduction of type of organization into the model, the findings of data analysis showed: (1) the effect of sacrifice on cohesion is stronger in formal organizations than in communal organizations, (2) among groups with sacrifice scores between 36.6 and 72.8 there is no statistically significant difference between types of organization and cohesion, and (3) among groups with sacrifice scores below 36.2, communal organizations are more cohesive than formal organizations, while among groups with sacrifice scores above 72.8, formal organizations are more cohesive than communal organizations.