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BOUNDARY SPANNING IN THE COOPERATIVE
EXTENSION SERVICE

A Dissertation Presented

By

SUSAN JANE UHLINGER

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

February 1979

EDUCATION

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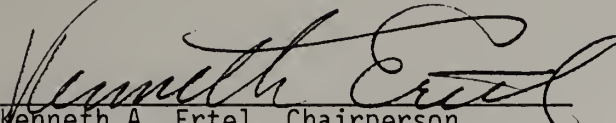
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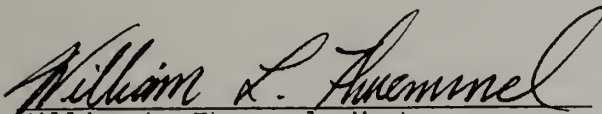
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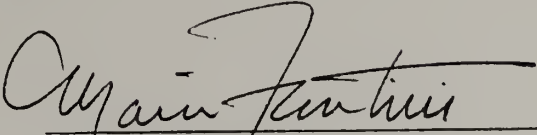
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To my family

A C K N O W L E D G E M E N T S

Sincere appreciation is extended to Dr. Kenneth A. Ertel, chairperson of my doctoral committee, for his counsel, support, and friendship throughout my doctoral program. Special thanks go to Dr. D. Anthony Butterfield who catalyzed my interest in organizational research and Dr. William L. Thuemmel for his insights into the dynamics of the Extension Service.

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A B S T R A C T

Boundary Spanning in the Cooperative
Extension Service
(December 1978)

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The boundary spanning activities: factors associated with the interactions, factors associated with effectiveness of the interactions, and frequency of interactions were documented with forty-seven Cooperative Extension Service (CES) county division heads and county directors in Massachusetts. The structured interview methodology was enhanced by the development of four codes which revealed 18 organization types, 18 reasons for interaction, 25 reasons for effectiveness of the interaction, and 13 reasons for noninteraction.

Extension staff cited 2,861 organizations with which they had contact with an average of 60 organizations per worker. The majority of interactions were with Business, Education, Natural Resource, and Government organizations for the purposes of program planning/delivery, technical assistance, and information sharing.

Interactions were perceived to be effective because of mutuality of the organizations, changed practices of the clientele, and good feedback. Recommendations are made for in-service training and other forms of support to improve work with other organizations.

TABLE OF CONTENTS

	Page
DEDICATION.	iv
ACKNOWLEDGEMENTS.	v
ABSTRACT.	vi
LIST OF TABLES.	xii
CHAPTER	
I THE PROBLEM	1
Introduction.	1
Statement of the Problem.	1
Purpose	4
Questions to be Answered.	6
Significance of the Study	7
Delimitations of the Study.	9
Definition of Terms	10
Framework of the Dissertation	14
II REVIEW OF SELECTED LITERATURE	16
Functions of Boundary Spanning.	16
Nature of the Environment	21
Framework for Analyzing Organization- Environment Relations.	23
Factors Associated with Boundary Spanning	27
Scope of Boundary Spanning.	29
Boundary Spanning in the Cooperative Extension Service.	33
Perceptions of CES Staff Regarding Boundary Spanning.	38
Variables Associated with Boundary Spanners	40
Hierarchical Level.	40
Education	41
Age, Tenure, and Sex.	41
Summary	42

CHAPTER	Page
III	METHODOLOGY. 43
	Description of Research Methodology. 43
	Research Variables 43
	Development of Instrumentation 44
	Pilot Study. 45
	Selection of Subjects. 46
	Instrumentation. 47
	Organization Type Code 47
	Reasons for Interaction Code 49
	Reasons for Effectiveness/Ineffectiveness Code 50
	Reasons for Noninteraction Code. 52
	Effectiveness Rating 53
	Questionnaire. 53
	Data Collection and Recording. 54
	Data Processing and Analysis 54
	Methodological Assumptions 55
IV	FINDINGS OF THE RESEARCH 56
	Characteristics of the Organization as a Collective. 56
	Organization Types and the Reasons for Interaction 58
	Primary Reasons for Interaction. 62
	Frequency of Interaction by Organization Type. 64
	Effectiveness of Interaction 64
	Reasons for Effectiveness/Ineffectiveness. 66
	Variables Associated with the Organization 69
	Characteristics of Members of the Organization 71
	Variables Associated with Members of the
	Organization. 71
	Organization Types and Reasons for
	Interaction by Divisions of the Organization. 73
	Organization Types and Reasons for
	Interaction by Staff Tenure 79
	New Contacts, Noninteraction with Organization,
	and Needs for In-Service Training 82
	New Contacts with Organizations. 82
	Noninteraction with Organization Types 84
	Perceptions of Needs for In-Service
	Training and Other Forms of Support 87
V	SUMMARY, DISCUSSION, RECOMMENDATIONS,
	IMPLICATIONS, AND EPILOGUE 90
	Summary. 90
	Discussion 92
	Nature of the CES Environment. 92

CHAPTER	Page
Factors Associated with Boundary Spanning in CES. . .	93
Reasons for Interaction, Effectiveness, and Reasons for Effectiveness.	96
Interactions by County Population	103
Interactions by CES Divisions	103
Interactions by Staff Tenure.	105
CES Noninteraction with Organizations	107
Recommendations	107
In-Service Training	107
Other Forms of the Research	108
Further Research.	109
Implications of the Research.	109
Epilogue.	113
REFERENCES.	116
REFERENCE NOTES	122
APPENDICES	
A LETTER TO POTENTIAL SUBJECTS.	124
B CONSENT FORM.	126
C INTERVIEW SCHEDULE.	128
D INTERVIEW SCHEDULE (continued).	130
E QUESTIONNAIRE	132
F PERCENTAGE OF ALL REASONS FOR INTERACTION BY ORGANIZATION TYPE.	134
G MEAN EFFECTIVENESS RATINGS FOR TYPES OF ORGANIZATIONS BY CES AND DIVISIONS.	137
H MEAN EFFECTIVENESS RATINGS FOR PRIMARY REASONS FOR INTERACTION	139
I PERCENTAGE OF ALL REASONS FOR EFFECTIVENESS OF INTERACTIONS	141

L I S T O F T A B L E S

Table		Page
1	Factors Affecting Interorganizational Cooperation.	30
2	Percentage of Respondents Suggesting Heavy Emphasis to Selected Clientele Groups.	36
3	Number and Percentage of Organizations Mentioned by Type.	57
4	Percentage of Primary Reasons for Interaction by Organization Type	59
5	Primary Reasons for Interaction Cited Most Frequently.	63
6	Frequency of Interaction by Organization Type.	65
7	Percentage of Primary Reasons for Effectiveness/Ineffectiveness of Interactions.	67
8	Percentage of Contacts with Organization Types of County Population	72
9	Organization Types and Primary Reasons for Interaction in Agriculture and CRD Divisions	74
10	Organization Types and Primary Reasons for Interaction in Home Economics Division	76
11	Organization Types and Primary Reasons for Interaction in 4-H Youth Work Division	77
12	Organization Types and Primary Reasons for Interaction Among County Directors	78
13	Primary Reasons and Interactions by Divisions.	80
14	Most Frequently Mentioned Organization Types by Staff Tenure.	81
15	Primary Reasons for Interaction by Staff Tenure.	83

Table		Page
16	Percentage of New Contacts with Organization Types and Mean Effectiveness Ratings	85
17	Percentage of All Reasons for Noninteraction	86

C H A P T E R I

THE PROBLEM

Introduction

Many studies of organizations allow the organizations to remain nameless, to be referred to by their generic functions such as "industrial," "health and welfare," and so on. This is not the case in this research. To refer to the study simply as research on an educational organization would be totally insufficient. All of the flavoring, nuances, and understanding of where the organization has been and where it is going would be lost if its identity remained anonymous.

This is an organization that traces its beginning back to the mid-19th century when the Morrill Act of 1862, providing 30,000 acre land grants equivalent to each state's congressional delegation, was signed into law by Abraham Lincoln (Vitzthum & Florell, 1976). The lands were to be sold and 10% of the proceeds used to purchase a college site, including an experimental farm. Earlier the same year, the Organic Act, creating the U.S. Department of Agriculture (USDA), also was signed into law. This was followed by a second Morrill Act, in 1890, expanding the work of land-grant institutions for the study of agriculture and mechanical arts and the Hatch Act of 1887 formally establishing Agricultural Experiment Stations (pp. 2-10).

By the turn of the century the first county agents were hired in Texas, Virginia, and Alabama, and youth clubs on corn growing, gardening, canning and livestock raising had begun in Mississippi (True, 1929).

Vitzthum and Florell (1976) report on how the progression of events led to the establishment of the Cooperative Extension Service:

As Extension-type work increased and flourished, it became readily apparent that greater federal support was needed. By 1905, the Association of American Agricultural Colleges and Experiment Stations established a standing committee on Extension work. The committee's report in 1908 urgently pressed for federal appropriations to support Extension work. President Theodore Roosevelt's Commission on Country Life a year later added its strong recommendation for "nationwide Extension work."

A bill filed in December, 1909, to finance Extension work by the agricultural colleges was the first of 32 such bills ultimately submitted. South Carolina Congressman A. Frank Lever put his in the hopper on June 2, 1911. An amended version of Lever's bill was introduced in the Senate more than a year later by Georgia's Hoke Smith. Nearly two more years elapsed before the Smith-Lever bill—by then even more modified—finally was passed. President Woodrow Wilson signed it May 8, 1914. (p. 7)

With the passage of the Smith-Lever Act, the Cooperative Extension Service (CES) was formally established through the mutual cooperation of USDA and the land-grant colleges. The Act specified that agricultural Extension work. . .

. . .shall consist of the giving of the instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise. . . (Vitzthum & Florell, 1976, p. 7)

Thus "Extension" was formed in the land-grant tradition—a term for the philosophy that knowledge should be made available for useful purposes. With emphasis on "practicability," "applied research," "result demonstrations" (teaching methods that show the results of a recommended practice), Extension work flourished and grew. From humble beginnings in a primarily agrarian society, the organization developed and changed over more than 60 years. Hildreth (1976) best summarizes what the Cooperative Extension Service has become:

- Extension is no longer confined to rural areas.
- Extension is no longer confined to agriculture and rural life. It has entered, or has been thrust, far beyond the original visions of Smith and Lever into forestry, marine advisory, community development, and 4-H and family living in an urban setting.
- The expertise to deal effectively with the problems encountered in these new activities isn't always available on the campus of the land-grant universities. Increasingly, these activities demand a multidisciplinary approach and off-campus resources.
- Extension's traditional field of production agriculture has become a very sophisticated enterprise involving fewer farmers. A multi-disciplinary approach is increasingly called for, involving not only production, but transportation, processing, marketing, and policy.
- Extension has entered, or has been thrust into new fields. It doesn't serve these fields exclusively, and in some may be a relatively minor participant. Urban youth activities are an example. At the same time, its open-ended legislative charter allows Extension to try to be almost literally all the things to all the people. As a practical proposition, however, limits are enforced by budget constraints and management changes.
- The breadth of Extension's charter and its operation complicates the task of characterizing Extension's proper role and defining its relationship to other agencies—public and private—operating in the same fields. (pp. 225-226)

Today CES is comprised of more than 16,000 educators working at county and state levels in every state, Puerto Rico, the Virgin Islands, and Guam in four different areas—Agriculture, Community Resource Development, Home Economics, and 4-H Youth Work (Kirby, Note 1). This study centers on the Cooperative Extension Service in the Commonwealth of Massachusetts and its work with other organizations.

Statement of the Problem

The interaction of an organization with its environment is an area of increasing attention in the study of complex organizations. Persons who work in interacting positions making contacts with individuals and groups outside the organization are termed boundary spanners (Aiken & Hage, Note 2). Their function is important to the organization because they are the "means by which organizations are linked to relevant elements in task environments; they are points of initial contacts between organizational and environmental contingencies and constraints; and they are the interface through which organizations and environments affect each other" (Leifer, Note 3).

Although Mintzberg (1973) found that managers spend up to one-half their time in boundary spanning, i.e., interacting with a network of contacts outside of their own organizations, little is known about the variety of organizations with which a manager may come in contact and the reasons for the interaction.

Two factors have implications for the boundary spanning of managers in an organization such as the Cooperative Extension Service (CES). First, CES has expanded the environment with which it works. When the organization was established in 1914 to conduct educational programs with rural populations, it interacted primarily with organizations having agrarian concerns (Smith & Wilson, 1930). As populations shifted to more urban and suburban areas, CES programs expanded to non-rural settings. This change increased the potential for managers in the organizations to interface with other organizations that did not have primarily agrarian concerns. The expansion of the environment in which CES works has followed Thompson's (1967) proposition that organizations with capacity in excess of what their task environment supports will seek to enlarge their domains. Task environment is defined by Dill (1958) as those parts of the environment which are "relevant or potentially relevant to goal setting and goal attainment."

The second factor having implications for the CES manager is that the environment itself has become increasingly complex with a proliferation of organizations that are concerned with the education and welfare of individuals and families. Thompson (1967) suggests that the pluralism of task environments is significant for complex organizations because it means that an organization must exchange with not one but several elements.

The result is that the manager of a county CES unit and the various division heads in Agriculture, Community Resource Development, Home Economics, and 4-H Youth Work overseeing the development

and delivery of educational programs have the potential of interacting with a large number of diverse organizations representing a variety of human concerns.

Purpose

This study develops a profile of the Cooperative Extension Service in Massachusetts and its work with other organizations by focusing on county CES directors and county CES division heads to describe, first, the types of organizations with which they are interacting. The second purpose is to determine the reasons for the interactions and the frequency of interaction. The third major purpose is to determine their perceptions of their effectiveness in interacting with other organizations. The final purpose is to make recommendations for in-service training or other forms of support to assist CES staff in improving their competencies in working with other organizations.

Questions To Be Answered

The study will address the following questions:

1. With what types of organizations are county CES directors and county CES division heads working?
2. What are the reasons for the interactions? What is the relative importance of the reasons? With what frequency do the interactions occur?
3. How do county CES directors and county CES division heads perceive their effectiveness in working with other

- organizations? What are the reasons for thinking that the interaction with the organization was effective or ineffective?
4. What are the reasons for not interacting with certain types of organizations?
 5. With what one organization have county CES directors and county division heads most recently interacted for the first time?
 6. What characteristics of the subjects (sex, age, job assignments, tenure in current job, and major area of formal training) are associated with the above questions?
 7. What characteristics of the county CES unit (county population and proportion of population by urban/town/rural/nonfarm/farm residence and number of full-time professional staff on permanent and temporary appointment) are associated with the above questions?
 8. What needs are perceived for improving their competencies in working with other organizations?

Significance of the Study

A recurring theme throughout this study is the gaining of new insights both about the organization—the Cooperative Extension Service—and about the staff of which it is comprised.

The primary contribution the study makes is the documentation of the scope of boundary spanning activity of CES among the total

population of county CES directors and county CES division heads in one state. It provides information about the types of organizations with which they are working, reasons for the interactions, the relative importance of the interactions, and perceptions of effectiveness. In addition, reasons for not interacting with certain types of organizations are documented.

The study also provides an assessment of county CES directors' and county CES division heads' perceived needs for improving their competencies in work with other organizations in order that recommendations may be made for future in-service training and other forms of support. Although other studies have focused on the general training needs of Extension workers with managerial responsibilities (McCormick, 1959; Price, 1960; Soobitsky, 1971; Vandeberg, 1957; Fernandez-Ramirez, Note 4; Nanjundappa, Note 5) none has centered particularly on the boundary spanning aspects of their work.

From the sampling of county CES directors and county CES division heads about organizations that they have most recently worked with for the first time, trends may emerge that suggest new directions in which CES is moving in working with other organizations.

The identification of organizations and reasons for interactions also will provide information for definition and clarification of roles of county CES directors and county CES division heads. Such definitions may be helpful in the personnel selection process.

Finally, the importance of the study in a more general nature will be to document the diversity of boundary spanning activities in one educational organization. Such information will provide a data base for future research comparing the scope of boundary spanning engaged in by CES with that of other organizations.

Delimitations of the Study

Boundary spanning, in this study, is defined in the narrow terms of work with other organizations and representatives of other organizations. It does not include work with individuals and informal groups which is also a part of the role of the county CES director and county CES division head. And, although the study includes the total population of county CES directors and county CES division heads in one state, it does not include all county CES staff engaged in Extension work in that state.

A second limitation is that the study takes a unilateral approach by focusing on the importance of work with other organizations and the effectiveness of the interaction only from the perspective of persons in boundary spanning roles in CES. It does not include perceptions of those persons in other organizations who are part of the boundary spanning interaction.

The study also does not make a distinction about the direction of the interaction taking place between CES and other organizations. Levine and White (1961) distinguished three types of directions:

1. Unilateral: where elements flow from one organization to another and no elements are given in return.

2. Reciprocal: where elements flow from one organization to another in return for other elements.
3. Joint: where elements flow from two organizations acting in unison toward a third party. (p. 600)

Although the direction of interactions is an important issue, it is beyond the scope of this research.

Neither does this study attempt to investigate the socio-psychological dynamics involved in the Extension workers' relationships with other organizations. Important work has been done in role theory by Blau (1955); Gross, Mason, and McEachern (1958); and Kahn, Wolfe, Quinn, and Snoek (1964). In this study, however, the organization is the unit of analysis. And although the findings may have some implications for role definition, that is not the major purpose of the research.

Finally, the study is concerned with one public educational organization which works with a set of organizations in order to accomplish its goals. The findings are not generalizable to other educational organizations which have different goals and may be operating with a different set of organizations and engaging in different types of interactions.

Definition of Terms

A variety of terms have been used to describe those persons whose job tasks cause them to operate across the boundary of their parent organization to another. These include terms such as "linking pins" (Organ, 1971), "liaison role" (Evan, 1966), "integrator"

(Lawrence and Lorsch, 1967), "boundary spanner" (Aiken & Hage, Note 2), among others (Leifer, Note 3).

Definitions of boundary positions also vary. Several definitions are based on the concept of role-set, i.e., "that complement of social relationships in which persons are involved simply because they occupy a particular social status (Merton, 1967, p. 42). Kahn et al. (1964), for instance, define a boundary position as one for which "some members of the role set are located in a different system—either another unit within the same organization or another organization entirely" (p. 101). Others have used more general definitions of the boundary position as an organizational role (Miller & Rice, 1967; Organ, 1971) in which the role set includes persons who are not members of the organization (Thompson, 1962).

In this study, a definition for boundary spanning is not concerned with the formal role associated with the boundary position but rather, with the activity of the person in the boundary position. Thus, the boundary spanning position is defined as being comprised of "those activities which link the focal organization with other organizations or social systems and are directly relevant for the goal attainment of the focal organization" (Aiken & Hage, Note 2). The term focal organization was used by Evan (1966, p. 178) in the same manner as focal position (Gross et al., 1958), i.e., the organization or class of organizations that is the point of reference.

The definition for organization comes from Hage and Aiken (1970) who distinguish between five different types of human aggregates: primary groups, voluntary associations, organizations, communities, and nation-states. They characterize organizations as being created and planned to accomplish specific objectives, having jobs delineated, generally having a planned and recognizable routine, and operating with a charter or constitution as a frame of reference for the members. This study does not include informal neighborhood or community groups in its consideration of organizations.

Environment, defined simply as anything external to the organization (Hage & Aiken, 1970), includes local, county, state, and federal governmental units, agencies, institutions, and other formal organizations.

It also is important that terminology used in the Cooperative Extension Service be defined.

The Cooperative Extension Service, CES, and the more common term "Extension" are synonymous and refer to the total organization with its federal, state, and county components.

The four divisions of CES are defined as follows:

Agriculture—(1) the production aspects of farming, ranching, and related income-producing activities including forestry, (2) the supplying of purchased agricultural inputs (goods and services), (3) the related marketing, processing, and distributing activities, and (4) soil and water conservation (Joint USDA-NASULGC Study Committee, 1968, p. 21).

Community Resource Development (CRD)—a process whereby people in the community arrive at group decisions and take actions to enhance the social and economic well being of the community (Joint USDA-NASULGC Study Committee, 1968, p. 25). An operationalized definition includes: (1) improving the economic

base through the development of business and industry, including the tourist and resort business; (2) improving local government financing and operation; (3) improving such services as police and fire protection, sanitation, streets, roads, and transportation; (4) improving school and library facilities and programs; and (5) improving city, town and township planning, including building and land development planning (Ferber, 1961, pp. 8-9).

Home Economics—including work with individuals, families, and other living units in the areas of human nutrition and health, clothing, home management, child development, family relations, housing, home furnishings, and family financial management (Joint USDA-NASULGC Study Committee, 1968, p. 27).

4-H Youth Work—includes all the subject matter areas in the other three divisions as they apply to youth development with special emphasis on environmental improvement, family living, nutrition and health, career exploration, and agricultural production (Benedetti, Cox, & Phelps, 1976, pp. 156-165).

The term County Director refers to the top administrative position in Extension at the county level. The person in that position is responsible for administering and supervising the four divisions of CES within the county.

County Division Heads refers to those persons who are in the top management position of their division in the county in either Home Economics or 4-H Youth work. The job title for these persons is County Extension Agent but, in this study, the distinction is made that county division heads are County Extension Agents with management responsibilities. In the case of Agriculture and Community Resource Development there are no division heads, per se, but County Extension Agents in these divisions have assignments for working with specific clientele groups such as fruit growers, dairy farmers, natural resource agencies, marine industries, etc., and thus are considered "managers" of their programs.

Framework of the Dissertation

The study and understanding of complex organizations is enhanced, according to Haas and Drabek (1973) by conceptualizing organizational research in system terms. With such an approach, information is gathered about properties of the system and then explorations can be made into system-subsystem and system-supersystem interactions.

A typology developed by Lazarsfeld and Menzel (1964) is a useful tool for studying organizations in a more systematic manner. An organization, in this model, is viewed as a "collective" which may be described by three types of properties: (1) analytical properties based on data about the members; (2) structural properties based on data about relations among members; and (3) global properties of individual members. An organization also may be viewed in terms of its "members" (participants or groups of participants) who may be described by another set of properties: (1) absolute properties including most characteristics commonly used to describe individuals without reference to the particular collective; (2) relational properties referring to relationships among members; (3) comparative properties characterizing a member by comparison between his/her value on some property and the distribution of this property over the entire collective of which s/he is a member; and (4) contextual properties describing a member by a property of his/her collective.

This typology—distinguishing between properties of the organization CES and properties of its members—is used to structure Chapter II, and the Review of Selected Literature; organizations are discussed first in terms of collective characteristics and secondly, in terms of characteristics of the members. In Chapter III the methodology developed for the design of the study is reported. The findings of the research appear in Chapter IV. The summary, discussion, recommendations, implications, and epilogue appear in the final chapter.

CHAPTER II
REVIEW OF SELECTED LITERATURE

The review of selected literature, following the typology suggested by Lazarsfeld and Menzel (1964), centers first on four global properties of the organization as a collective. The first two—the function of boundary spanning and nature of the environment—are background information about organizations and relations with their environments. The next two properties—factors associated with boundary spanning and scope of boundary spanning—relate directly to the questions being addressed in this study.

The second part of the review is concerned with two properties of the members of organizations—perceptions of CES staff regarding boundary spanning and variables associated with boundary spanners.

Functions of Boundary Spanning

The first property, the function and importance of boundary spanning to the organization, has been widely discussed in the literature. Among the major contributors in this area is Adams (Note 6) who identified five general classes of boundary activity:

1. Transacting the acquisition of inputs and the disposal of outputs.

2. Filtering inputs and outputs. Organizations are selective with respect to their inputs and outputs.
3. Searching for and collecting information and intelligence. It is clear that a premium is placed on the ability to discern anticipatorily the activities of other organizations, especially those in distant-order environments since a given organization has no direct links to them.
4. Representing the organization to external organizations. This class of activities—which includes informing and misinforming, creating an "image," managing impressions, and the like—is relatively unidirectionally directed from an organization to others.
5. Protecting the organization's integrity, territory, technological core, etc., and buffering external threat and pressure.

Miles (in press) differentiates between the internal technical and managerial functions in complex organizations and those functions of the boundary spanner that are institutional-adaptive functions. The first function, representation, is defined as the "presentation of information about the organization to its environment for the purpose of shaping the opinions and behavior of other organizations, groups, and individuals in the service of the organization" (p. 7). Miles stresses the importance of the representational function:

The ease with which an organization is able to deal with outside groups, to achieve legitimacy in their eyes, and consequently to win their support and goodwill, is directly related to the abilities of persons occupying representational boundary roles (p. 8).

The second major function described by Miles (in press) is scanning and monitoring the environment.

Scanning is a search for major discontinuities in the external environment that might provide opportunities or constraints to the organization.

Miles cites the Swiss watchmaking industry which failed to appreciate the development of electronic watches and thus lost a large share of the world market as an example of lack of scanning.

Monitoring the environment involves:

. . . tracking continuous, sometimes gradual, changes in environmental indicators which have been established as relevant strategic contingencies of the organization. . . focused monitoring units include the affirmative action office, the organization's formal instrumentality for coping with the impacts of civil rights legislation, and the office of the corporate legal counsel which keeps tabs on changing precedents on issues of central concern to the organization (p. 11).

Protecting the organization, the third function, refers to "warding off environmental influences and noises which might otherwise disrupt the ongoing operations and structures of the focal organization" (p. 13). The importance of the function is that the protector will "absorb external threats and pressures for change, particularly those judged to be unwarranted interventions into organizational life, and not transmit them to other parts of the organization which depend on being buffered so as to maximize the efficiency of their activities" (p. 14).

The fourth major function, information processing and gate-keeping, is characterized:

In addition to deciding which environmental sectors and events are relevant or potentially relevant for the organization, and coding the boundaries regulating information about them, persons occupying boundary roles must interpret their meaning, in terms of the opportunities, constraints, and contingencies they pose for the organization, translate the information

they obtain about these events into terms comprehensible to organizational decision makers, and make choices about what and when to communicate (p. 23).

The importance of information processors and gatekeepers has been summarized by Rosen (Note 7):

As organizations are forced to operate in increasingly complex environments, the ability to gather, analyze, and act on the best information available becomes critical. It is not the full and free flow of information per se which is necessary for the accomplishment of organizational goals. Consequently gatekeeping mechanisms are required at the organizational boundaries to filter, condense, and interpret volumes of raw data. . . however, . . . there is a potential error component to gatekeeping activities. Improper application of coding rules, omissions, exaggerations, and selective biases in information transmission represent breakdowns in the gatekeeping process. Reliance on information gatekeepers may leave organizational policy makers vulnerable to acting on incomplete or distorted information. Since the successful or unsuccessful execution of information transmission from the environment to internal decision centers has significant consequences for organizational adaptation, the entire process of information flow from gatekeeper to policy maker deserves systematic examination.

The fifth major function (Miles, in press), transacting, refers to the "activities necessary for the acquisition of inputs and the disposal of outputs, both of which are essential to organization survival" (p. 30).

Finally, the linking and coordinating function takes place between the activities of two or more systems. Miles (in press) cites the importance of this function to social service agencies which often must rely heavily on external organizations to obtain

necessary financial resources and other forms of support (p. 36).

Aiken and Hage (1968) concur with the notion of the need for resources as a factor in fostering the "linking" function. They investigated the relationships between organizational interdependence and internal organizational behavior with 16 social welfare and health organizations. Interdependency was measured in terms of joint, cooperative activities with other organizations. The authors held the view that organizations are "pushed" into such interdependencies because of their need for resources—not only money, but also resources such as specialized skills, access to particular kinds of markets, etc. (p. 915). They relate the need for resources directly back to the nature of the organization with three assumptions as to why organizations become involved in interdependent relationships:

1. Internal organizational diversity stimulates organizational innovation.
2. Organization innovation increases the need for resources.
3. As the need for resources intensifies, organizations are more likely to develop greater interdependencies with other organizations, joint programs, in order to gain resources (p. 915).

In a similar vein to Adams (Note 6) and Miles (in press), other researchers (Keller, Szilagyí, & Holland, 1976) have looked at boundary spanning as a means for gathering information about the environment. Organ (1971) stresses the informational aspects of boundary spanning as a way to monitor important events in the environment and transmit knowledge, perceptions, and evaluations

of the organization environment to the focal organization. Thompson and McEwen (1958) caution that "one of the requirements for survival appears to be the ability to learn about the environment accurately enough and quickly enough to permit organizational adjustments in time to avoid extinction" (p. 29). Aldrich and Herker (1977) theorize about the importance of information processing with the hypothesis that "an organization's ability to adapt to environmental contingencies depends in part on the expertise of boundary role incumbents in selecting, transmitting, and interpreting information originating in the environment" (p. 219).

The information processing function of the boundary spanner also has been the focus of research by Perrow (1970) and Leifer and Delbecq (1977) who view it as a means for reducing uncertainty about the environment.

Before proceeding further on the discussion about boundary spanning, it is important that some consideration be given to research regarding the environment in which organizations function. The nature of the environment is the next property to be discussed.

Nature of the Environment

The complexity of the environment has been termed by Emery and Trist (1965) as its "causal texture" which refers to the interdependencies or degree of connectedness within the environment itself. They describe four types of textures ranging from the simplest—"placid, randomized environment"—to the most complex level, a "turbulent field." The latter is characterized by

increased complexity of interorganizational relationships but also by "dynamic properties (that) arise not simply from the interaction of the component organizations, but also from the field itself. The 'ground ' is in motion" (p. 26). Terreberry (1968) goes on to describe the turbulent field as one in which the effects of interaction are happening faster and are more complex than can be predicted and controlled by the participants.

Thompson (1967) discusses complexity from the perspective of "task environments," a term used by Dill (1958) to denote those parts of the environment which are relevant to goal setting and goal attainment of the organization. Task environments may vary on two dimensions: homogeneous-heterogeneous and stable-dynamic. Thompson's (1967) notion is that the more heterogeneous the task environment, the greater the contingencies presented to the organization. His view suggests that a turbulent environment might exist with the presence of both heterogenous and dynamic conditions.

The changing environment has implications for organizations. Ohlin (1958) says that greater organizational adaptability is required because of the rapidity of social change today. Blau and Scott (1962) suggest that success of a firm depends upon the ability to establish symbiotic relations with other organizations in which extensive advantageous exchange occurs (p. 217).

Several studies have addressed the increased interaction of organizations with their environments, but few explanations emerge as to how or why these interactions came about. Rosengren (1964)

reports on the mental health field in which "a more symbiotic relationship has come to characterize the relations between the hospitals and other agencies, professions, and establishments in the community." Clark (1965) outlines the changes in educational organizations that have occurred as the influence of private foundations, national associations, and divisions of the federal government increased. Maniha and Perrow (1965) trace the development of a youth commission which had little reason to be formed, no definition of goals, and was comprised of people who wanted the commission to maintain a low profile, no-action role in the community. A combination of events and the influence of other organizations with their own goals caused the commission to be used by other organizations for their own ends, but "in this very process it became an organization with a mission of its own, in spite of itself" (p. 239).

Frameworks for Analyzing Organization-Environment Relations

Several frameworks have been proposed for analyzing an organization's relation to its environment: organization-set, cooperation, routineness, and networks. These are reviewed briefly below.

The model developed by Evan (1972) is patterned after Merton's (1957) role-set by using the organization as the unit of analysis with the network of organizations in its environment being the organization-set.

Dimensions of the organization-set include:

1. Input vs. output organization-sets. Input organization-set is the complement of organizations providing resources

to the focal organization. Organizations receiving the goods and/or services of the focal organization comprise the output organization-set.

2. Size of the organization-set.
3. Ratio of boundary to non-boundary personnel.
4. Degree of expertise of boundary personnel.
5. Hierarchical position of boundary personnel. Boundary personnel are distinguished by their authority to engage in decision-making activities.
6. Normative reference group orientation of boundary personnel. Distinction is made between boundary personnel who orient themselves to the values and norms of their own organization or to some other organization. Gouldner (1957, 1958) has noted that organizations employing large numbers of professionals such as universities and hospitals are faced with a more cosmopolitan reference group orientation which might impede organizational goal attainment (Evan, 1972, pp. 188-189).

As noted by Terreberry (1968), Evan makes no explicit assumptions about the nature of environmental dynamics, nor does he imply they are changing.

The second framework, developed by Thompson and McEwen (1958), suggests competition and three forms of cooperation as processes for an organization to deal with its environment. The cooperative strategies include bargaining as the negotiation of an agreement for the exchange of goods or services between two or more organizations; co-optation as the process of absorbing new elements into the leadership or policy-determining structure of an organization as a means of averting threats to its stability or existence; and coalition as a combination of two or more organizations for a common purpose. The latter, which is not uncommon among educational

organizations, is widely used when two or more enterprises wish to pursue a goal to get more support, especially for more resources, than any one of them is able to marshal unaided (Thompson & McEwen, 1958).

Leifer and Delbecq (1978), in a third framework, describe the degree of routineness of the boundary spanning activity in terms of the degree to which the initiation of boundary spanning is regulated, on one dimension, and the extent to which the processes of boundary spanning or the degree to which the boundary spanner's tasks are routinized on the other dimension. The latter is related to the nature of the environment and the authors suggest that as the environment becomes more complex and heterogeneous, the task of the boundary spanner becomes more difficult and complex. In a study of a health and welfare organization (Leifer & Wortman, Note 8) it was found that boundary spanning was described as non-routine; in contrast, boundary spanning in a research and statistics organization was described as routine (Leifer & Wortman, Note 9).

A discussion of organizations and their environments would not be complete without consideration of another framework which is concerned with organizational networks. In this research, the emphasis has departed from the focal organization as the unit of analysis in favor of the interorganizational network as the emerging entity. Benson (1975) suggests that organizations participating in a network are engaged in "highly coordinated, cooperative interactions based on normative consensus and mutual respect" (p. 235). In research

by Benson, Kunce, Thompson, and Allen (1973) four dimensions of interorganizational equilibrium are identified:

Domain consensus: agreement among participants in organizations regarding the appropriate role and scope of an agency.

Ideological consensus: agreement among participants in organizations regarding the nature of the tasks confronted by the organizations and the appropriate approaches to those tasks.

Positive evaluation: the judgment by workers in one organization of the value of work of another organization.

Work coordination: patterns of collaboration and cooperation between organizations. Work is coordinated to the extent that programs and activities in two or more organizations are geared into each other with a maximum of effectiveness and efficiency (p. 51).

Although an in-depth review of the literature on networks is beyond the scope of the issues of this research, it is important to note that network concepts (with varying definitions of the term) have been developed in more than a dozen fields including sociology, anthropology, psychiatry, psychology, administrative sciences, geography, city planning, communications engineering, and subfields within these disciplines (Sarason, Carroll, Maton, Cohn, & Lorentz, 1977).

As is shown in Chapter 3, the design for this study is more like the model suggested by Evan (1972) using the organization-set as the focus rather than the other models. This study differs from Evan's framework, however, in that it identifies specific properties associated with the organization CES and its interactions with other organizations. In the next section some of the research that has

been done on factors associated with boundary spanning is reported.

Factors Associated with Boundary Spanning

Reviewing the literature regarding factors associated with boundary spanning leads into another stream of research—interorganizational relations. Donnelly (1977) cited 25 studies, both theoretical and empirical, which were concerned with facilitating or motivating factors involved in organizations' relationships with one another. The review here will be limited to those studies which were concerned with social services, health, and community development organizations which are similar to CES in the type of function they perform.

Nine studies were reviewed and the factors tended to cluster into three areas: philosophical orientation, characteristics of the organization, and environmental contingencies.

In the philosophical orientation, agreement on objectives and goals was found to be a factor in studies of community chests (Litwak & Hylton, 1962), in health and welfare agencies (Levine & White, 1961), and in a social planning council and economic development district (Finley, 1970). With these same organizations, awareness of their common concerns (Litwak & Hylton, 1962) and domain consensus (Levine & White, 1961) also were identified as contributing factors. Finley (1970) found prestige and relative power of organizations to also be significant.

Factors associated with the characteristics of the organization are complexity of the organization and standardization of

boundary spanning. Aiken and Hage (1968) found the complexity of the organization based on professional training, professional activity, and number of occupations to be a factor affecting relationships among health and welfare organizations. Leifer and Wortman (Note 8) also found professional training and educational level to be a factor. Standardization of boundary spanning was identified as a factor in community chests (Litwak & Hylton, 1962) but was not a factor in a health and welfare organization (Leifer & Wortman, Note 8).

Finally, environmental contingencies also have been identified as having an effect on relations among organizations. Municipal scale and diversity, as one variable, and the extent to which agencies were uncontested and community-wide, as a second variable were found to be factors in relationships among hospitals (Turk, 1973) and antipoverty networks (Turk, 1970). Similarly, Finley (1970) identified size of organizational area, distance between organizations, and territory overlap as important factors in a social planning council and economic development district. The number of organizations involved was cited as a factor among community chest agencies (Litwak & Hylton, 1962) and among educational institutions (Sarason et al., 1977). The accessibility of organizations to necessary elements in the environment was identified as a significant factor among health and welfare agencies (Levine & White, 1961).

A comprehensive list of factors associated with organizations' work with one another was developed by Schermerhorn (cited in

Donnelly, 1977) and further expanded by Donnelly (1977) as shown in Table 1. The factors are categorized as motivating conditions, facilitating conditions, capacities within the organization and in the environment, costs, and opportunities to cooperate.

Scope of Boundary Spanning

The extent to which an organization engages in boundary spanning appears to be influenced by two factors. The number of boundary spanning positions has some relation, but the type of organization appears to be a more critical factor.

The number of boundary spanning roles may be partially dependent on size (Aiken & Hage, Note 2) and a small organization may be characterized by relatively few differentiated roles (Blau & Scott, 1962; Child, 1973) where information is gathered informally by the members.

The literature indicates that the type of organization and the technology in which it engages is much more of a predictor of the scope of boundary spanning activity than the size factor.

Thompson (1967), for instance, distinguished between different patterns of organization-environment interaction by the technology in which the organization is engaged. The three technologies were described as (1) mediating which involves schools, governmental agencies, banks, insurance companies, post offices, etc.; (2) long-linked which involves standardized production of large volumes of output; and (3) intensive which involves people-changing activities such as in hospitals or correctional institutions. The mediating

Table 1

Factors Affecting Interorganizational Cooperation

<u>Motivating Conditions</u>	<u>Facilitating Conditions (cont.)</u>
Resource shortage	Unessentiality of project
Performance distress	Surety of expected benefits
Specificity of function	Conducive characteristics of —
Significant value expectancy	Personnel
Normative	Organization
Objective	Environment
Internal	Project
External (domain)	Process
Outside pressure	Change Agent
Lack of other alternatives	Impact of supporting institutions
Positive past experience	Credibility of contact person(s)
<u>Facilitating Conditions</u>	<u>Capacities</u>
Permeable boundaries	Intra-organizational
Overlapping memberships	Resource available
Interflow of people, information, products	Relative internal harmony
Homogeneity of personnel groups	Professional personnel involved
Awareness of interdependencies	External environment
Organizational contact	Large number of organizations in "set"
Perceived common threat or crisis	Values of "set"
Shared input resources	Comparability of size, prestige, etc.
Output competition	General economy strong
Awareness of potential partners	<u>Costs</u>
Cooperation recognized as an alternative	Unfavorable impact on autonomy
Units of exchange available	Unfavorable impact on image
Mechanisms for controlling exchange available	Unfavorable impact on third-party relationships
Domain not a sensitive issue	Excessive drain on resources
Commonality of goals, values	Incompatible operating goals
Complementarity of goals, function	"Territorial" conflicts
Distinctiveness of goals	<u>Opportunities to Cooperate</u>
Acceptance by staff	Internal norms & capacity
Role set of boundary personnel	Resources available
Authority vested in boundary personnel	Acceptance by staff
Acceptable loss of decision-making autonomy	Acceptance by supporters
	Cooperation valued

Table 1 (continued)

Opportunities to Cooperate (cont.)

External norms & capacity
Proximity of partners
Cooperatjon valued by "set"
Potential partners exist
Innovative community

NOTE: From "Factors affecting interorganizational cooperation" by R. S. Donnelly (Doctoral dissertation, University of Massachusetts, 1977), Dissertation Abstracts International, 1977 38A, 1748A. (University Microfilms No. 77-22,000); copyright 1977 by R. S. Donnelly. Reprinted by permission.

technologies, which have been termed "people-processing" organizations (Masenfeld, 1972) have the highest number of boundary personnel.

The extent of boundary spanning by type of organization also was researched by Leifer and Huber (1977) but from the standpoint of the "organicness" of the organization. The authors found a strong positive relationship between organicness—the looseness or flexibility of the organization structure—and the frequency of boundary spanning activity, i.e., the more flexible the structure, the more boundary spanning activity.

Mintzberg (1973) found the type of organization to be a factor in boundary spanning but also that generally more boundary spanning was engaged in by all managers than had been known. Structured observations of five chief executives—the chief executive officer of a major consulting firm, the president of a research and development firm, head of an urban hospital, president of a firm producing consumer goods, and the superintendent of a large suburban school system—indicated that their contact outside of their own organizations comprised one-third to almost one-half of their time. The school superintendent was found to have 43 percent of his contacts outside the organization with the mayor, state education department, school committee, parent-teachers association, individual parents, and individual residents.

Boundary Spanning in the Cooperative Extension Service

In a study that centered on properties of organization-environment relations, Rogers (1974) collected data from 159 public and private organizations located in 16 different counties in Iowa in order to determine the level of cohesiveness, i.e., the extent to which the top administrators were crossing the boundaries of their own organizations in order to interact with each other. Organizations were selected on the basis of their being involved in community development activities and were grouped into three general categories: (1) U.S. Department of Agriculture (USDA) agencies which included Agricultural Stabilization and Conservation Service (ASCS), Soil Conservation Service (SCS), Cooperative Extension Service (CES), Farmers' Home Administration (FHA); (2) state and county public agencies—welfare department, Forest Services, Conservation Board, Planning and Zoning Commission, Employment Security Office, community action agency; and (3) private and voluntary associations—Rural Electric Cooperative, Bankers' Association, County Ministerial Society, Farm Bureau, and Industrial Development Corporation. The data across the 16 counties showed a fairly consistent interaction pattern of clustering into concerns about agriculture, social welfare, and the environment. That is to say, organizations concerned with agriculture indicated high intensity of interactions. Similarly, social welfare organizations such as welfare departments, community action agencies, and employment security offices indicated a high degree of interaction. The other

major finding from this study was that the Cooperative Extension Service had the highest centrality score, i.e., had more interaction with other organizations than any of the others in the study. The author attributes this finding to the nature of CES as an agency that provides referrals and information and renders direct services to client groups (p. 501).

Other than the Rogers' study (1974), there has been a singular lack of documentation of the boundary spanning activity in CES. That is not to say, however, that concern for working with other organizations is not part of the philosophy and mission of CES.

As early as 1916, two years after CES was established, a collection of articles was published—Agricultural Extension as Related to Business Interests (NIVA, 1916)—which stressed the importance of agricultural extension work in cooperation with local business and professional organizations, bankers, merchants, manufacturers, railroads, newspapers, and churches in order to develop the agricultural resources of the country.

In a similar vein, Smith and Wilson (1930) recommend the CES advisory system which should include representatives from each farmer's organization in the county such as the Farmers' Union, Grange, Dairymen's Association, Cotton Association, Horticultural Society, and Tobacco Growers' Association in addition to representatives of the bankers' association, chamber of commerce, and merchants' organizations.

Even in international extension work, the training manual for Extension personnel in Malawi encourages cooperation with other organizations such as community development, homecraft and health workers, farmers' marketing board, cooperatives, and local government in order to gain support for Extension activities (Bradfield, 1966).

In the 1960's, a study conducted by the U.S. Department of Agriculture and the National Association of State Universities and Land-Grant Colleges (Joint USDA-NASULGC Study Committee, 1968) included a survey of state CES directors, CES staff, and selected citizens and support groups. An adaptation of the findings on audience priorities of CES appears in Table 2. Work with county and community organizations as a priority audience was in high agreement among CES directors (about 81%) and CES staff (about 57%) as compared to about 44% of the general public. In addition, CES staff indicated that county and community organizations should be a first priority audience; CES directors rated county and community organizations third after other commercial farms and low-income families. The general public was most in agreement about low-income farms being the top priority, but farm organizations, educational institutions, and county and community organizations followed in that order (pp. 34-36).

More recently a treatise on the role of CES in American society (Vines & Anderson, 1976) devotes a chapter to discussion of Extension's linkages with other organizations from a vertical and horizontal perspective. The vertical relationships are primarily

Table 2

Percentage of Respondents Suggesting Heavy Emphasis
to Selected Clientele Groups
(Percentages are approximate)

Clientele Group	State CES Directors N=43 %	CES Staff N=7, 325 %	General Public N=2, 729 %
<u>Large corporate farms</u>	8	14	6
<u>Farm families</u>			
Highly specialized farms	81	49	33
Other commercial farms	93	53	33
Low income farms	65	54	65
Part-time farms	20	17	13
Retired farm families	6	9	10
<u>Rural non-farm families</u>			
Open country	40	21	14
Village/town under 2500 pop.	58	29	19
Low income	70	39	10
Retirement	6	12	10
<u>Urban families</u>			
Small cities (2500 to 50,000 pop.)	70	30	15
Suburban	52	23	11
Central cities (over 50,000 pop.)	31	15	4
Low income	84	34	30
Retired families	15	11	7
<u>Industry personnel</u>			
Farm suppliers	60	26	17
Farm production purchasers/ processors	71	38	25
Cooperatives	67	13	25
Corporations	7	12	4
Small businesses	31	22	19
Credit/finance institutions	26	21	15
<u>Organizations/institutions</u>			
Educational	44	54	47
Government agencies/officials	47	23	13
County/community organizations	81	57	44
Trade/industry organizations	25	17	11
Farm organizations	33	40	52
Labor organizations	11	6	5
<u>Non-extension professional</u>	42	15	4
<u>General public</u>	32	37	26

NOTE: The data are from the Joint USDA-NASULGC Study Committee on Cooperative Extension, 1968, pp. 34-36.

those established by the U.S. Department of Agriculture through memoranda of agreement (Thomson & Brown, 1976). Thus, it is established at the national level that CES will carry out certain functions at the local level with organizations such as Soil Conservation Service, Agricultural Stabilization and Conservation Service, Farmers' Home Administration and others (Hardin, 1955). Thomson and Brown (1976) also point to the many horizontal relationships—crossing agency boundaries—that have been established. Extension's 4-H youth program's extensive contact with organizations in the private sector in order to gain resources is an example. Other horizontal linkages have been made with government officials and private groups concerned with community development; local, county, and state governments; farm organizations; and school systems (pp. 58-62). The report identifies seven reasons why CES interacts with other organizations at any of its three levels—county, state, federal:

1. To develop joint program efforts between Extension and other agencies and organizations.
2. To facilitate communications between these agencies and organizations and Extension.
3. To articulate to other agencies and organizations Extension's capability to carry out appropriate aspects of programs at national, state, and/or local levels.
4. To gain resources and support for Extension and other programs.
5. To minimize duplication of efforts.
6. To resolve existing or potential controversial program and operational issues.
7. To coordinate and develop educational materials with requirements of regulatory agencies (Thomson & Brown, 1976, p. 63).

At this point the discussion of the properties relating to the organization as a collective concludes. The review now considers of the members or individuals who comprise the organization by looking at two properties—perceptions of CES staff regarding boundary spanning and variables associated with boundary spanners.

Perceptions of CES Staff Regarding Boundary Spanning

As was noted earlier, little research has been forthcoming on the scope of boundary spanning in the Cooperative Extension Service. There are several studies, however, that focus on perceived roles and training needs of Extension managers and field staff which include reference to work with other organizations outside of CES.

It is disappointing to find the low priority given to work with other organizations in several studies. For instance, CES district leaders with responsibility for supervising several counties were the focus of a study in Wisconsin (Vandeberg, 1957). All CES staff in the state were part of the study in which they ranked the importance of 25 functions of district leaders. Most of the functions identified were concerned with intraorganizational administrative and program development activities. Those functions that related to work outside of CES were "improving public relations with county governing bodies"—ranked fifteenth—and "improving public relations with industry, chambers of commerce, etc."—ranked twenty-second.

Early studies among CES staff in Ohio (McCormick, 1959) and Arkansas (Price, 1960) on perceived training needs showed agreement on needs for developing competencies in educational program planning and development, human development, and technical knowledge, but little importance was given in both studies to understanding social systems and Extension organization and administration.

Similarly, a study on training needs of CES agents working with Kentucky rural poor conducted by Mann (cited in Soobitsky, 1971) indicated competencies were needed for understanding low-income families in order to develop appropriate educational programs. Although understanding the community participation pattern of such families was cited as an important need, there were no competencies mentioned which were concerned with having knowledge of or developing cooperative efforts with other organizations already serving the poor.

In addition, a summary of the administrative-supervisory functions of county CES directors in all of the states and Puerto Rico (Nanjundappa, Note 5) indicated that the functions were primarily related to intraorganizational responsibilities except for one—making contact with the county governing board or body.

Work with other organizations was given greater priority in other research. Fernandez-Ramirez (Note 4), in a study of the perceptions of the administrative functions of county CES chairmen among the total CES staff in Puerto Rico, found administrative

relations to be the second most important responsibility of the county chairman after educational leadership. Among the responsibilities considered most important were Extension prestige or good will, acceptance of Extension in the community, relationships with leaders in the county, and opportunities to promote Extension before the public.

As more Extension work has moved into urban areas, more needs for improving competencies in work with other organizations have been expressed. Soobitsky's (1971) study of CES agents working with urban disadvantaged audiences found communication skills and understanding of social systems as the two areas of greatest need for training. The latter included such competencies as:

- understanding the purpose of the various public agencies serving the disadvantaged and their relationship to Extension. . .
- understanding the patterns of interdependence of the various groups in disadvantaged areas. . .
- understanding the community organization in disadvantaged areas. . .
- understanding the functions of organizations in disadvantaged urban life. . .
- understanding why people join groups and organizations (pp. 75-76).

The final part of the review is concerned with other variables that have been found to have a relationship to the activity of boundary spanners.

Variables Associated With Boundary Spanners

Hierarchical Level

Boundary spanning activity was found to be markedly different by occupational level in a study of a large manufacturing firm

(Keller et al., 1976). Higher occupational levels placed greater value of boundary spanning as a part of their jobs. This finding contrasts to an earlier study by Kahn et al. (1964) which showed boundary spanning activity related to high levels of role conflict and ambiguity.

Leifer and Wortman also found boundary spanning to vary by occupational level in both a health and welfare organization (Note 8) and a research and statistics organization (Note 9) with more boundary spanning at higher levels.

Education

Higher educational levels were associated with more boundary spanning activity in a health and welfare organization (Leifer & Wortman, Note 8) but not in a research and statistics organization (Leifer & Wortman, Note 9). In social welfare and health organizations (Aiken & Hage, 1968), boundary spanners had a higher educational level than non-boundary spanners.

Age, Tenure and Sex

High boundary spanners tended to be older than low boundary spanners in both a health and welfare organization and a research and statistics organization (Leifer & Wortman, Note 8, Note 9). In terms of tenure, high boundary spanners were in their jobs longer in the health and welfare organization (Leifer & Wortman, Note 8) but not in the research and statistics organization (Leifer & Wortman, Note 9). There was no difference by sex for high

boundary spanners in either type of organization (Leifer & Wortman, Note 8, Note 9).

Summary

The review of selected literature has provided background information on organizational boundary spanning and environments as a frame of reference for the more specific issues having a bearing on this study: factors associated with boundary spanning; the scope of boundary spanning in organizations, in general, and the Cooperative Extension Service, in particular; and the perceptions and characteristics of boundary spanners.

CHAPTER III

METHODOLOGY

This chapter describes the process that was used in developing the interview schedule and the procedure followed in collection of the data.

Description of Research Methodology

This research is basically a descriptive study which documents the boundary spanning activity in the Massachusetts Cooperative Extension Service (CES). It also examines the nature of the interactions, perceptions of the effectiveness of the interactions, and perceptions of why the interactions were effective or ineffective.

The interview method was selected because of the nature of the questions to be asked. Due to the volume of data, the interview was standardized and coded in the field according to procedures outlined by Maccoby and Maccoby (1954).

Research Variables

The study centers on nine variables:

1. Type of organization with which there was contact between June 1, 1977 and June 1, 1978. Contact was defined as meetings, programs, and telephone calls.
2. Primary, secondary, and tertiary reasons for having the interaction.
3. Frequency of interaction.

4. Effectiveness rating of the interaction based on the primary reason for interaction.
5. Primary, secondary, and tertiary reasons for the rating of effectiveness as given in 4.
6. Variables 1, 2, 4, and 5 in relation to one organization interacted with most recently for the first time.
7. Type of organization with which there was no interaction.
8. Primary and secondary reasons for not having interaction.
9. Perceptions of needs for in-service training or other forms of support to increase the effectiveness of working with other organizations.

The variables relating to the members of the organization are sex, age, job assignment, tenure in current job, and major area of undergraduate and graduate training. The variables relating to the organization, i.e., the county CES unit, are the proportion and size of population by residence and the full-time county professional CES staff on permanent and temporary assignment.

Development of Instrumentation

The study design required the development of four codes in order to facilitate the recording of data in the field: (1) organization type code, (2) reasons for interaction code, (3) reasons for effectiveness/ineffectiveness code, and (4) reasons for noninteraction code.

A review of the literature provided a tentative categorization of organizations based on systems used by the Catalog of Federal Domestic Assistance (Office of Management and Budget, 1977) and the Encyclopedia of Organizations (Fisk, 1977). Initial drafts of the

other three codes were based on literature regarding the functions of boundary spanners (Levine & White, 1961; Litwak & Hylton, 1962; Miles [in press]); roles of managers (Mintzberg, 1973); and inter-organizational relations (Donnelly, 1977; Rogers & Molnar, 1976).

The codes were expanded and refined after interviews were conducted independently with three CES staff members who were not part of the sample.

Pilot Study

Pilot interviews were conducted with four county CES staff members in Connecticut who represented four different job assignments: Community Resource Development, Home Economics, 4-H Youth Work, and field coordinator. The preliminary interview schedule was used and the interviews also were recorded on audio tape. Following the pilot test, refinements were made in the codes.

The next step was to check the completeness of the codes. One-half of the data (every other response) was transcribed and a list made of the verbatim responses. Two CES staff members, who had assisted in the initial development of the coding system, coded the responses with the purpose of checking the completeness of the codes. Problem points were discussed and resolved. Final refinements were made.

Selection of Subjects

Subjects were selected using the following criteria:

- had been in employ of CES in their current position for a full year. Persons who had been in the position for less

than one year, had been on sabbatical leave, or had a dual assignment in Agriculture and CRD were not included.

and, one of the following:

- holds the position of county director.
- holds the position of county division head in Home Economics or 4-H Youth Work.
- holds a position in Agriculture or Community Resource Development.

The population breakdown was: county directors - 9; Agriculture - 18; Community Resource Development - 6; Home Economics - 12; and 4-H Youth Work - 11; for a total of 56.

Meetings were held with the Associate Director of CES and the county directors to review the purpose of the research and possible uses of the data.

A letter and consent form were sent to each potential subject from the Associate Director of CES (see Appendices A and B). Of the 56 potential subjects contacted, 54 replied and agreed to be interviewed, one replied and declined, and one did not reply. Of the 54 who agreed to be interviewed, there were scheduling problems with three people and incomplete data from four people. Thus, the N was 47 with the following breakdown: county directors - 7; Agriculture - 15; Community Resource Development - 5; Home Economics - 12; and 4-H Youth Work - 8.

Instrumentation

A sample of the interview schedule appears in Appendices C, D, and E. A form similar to that in Appendix C was used for recording information about each organization type. An elaboration and definition of the coding systems follow.

Organization Type Code

Eighteen categories were included in the organization type code for recording answers to Question 1.

1. Agriculture — such as commodity organizations, live-stock breeder organizations, Farm Bureau Federation, Milk Promotion Services, state department of agriculture, Agricultural Stabilization and Conservation Service, Farmers Home Administration, Dairy Herd Improvement Association.
2. Business/Commerce — such as agribusiness, cooperatives, farmers' markets, commercial and savings banks, Federal Reserve Bank, Federal Land Bank, public utilities, shopping malls, Chamber of Commerce, service clubs, other private enterprise.
3. Consumer Protection — such as consumer councils, consumer protection bureau in the attorney general's office, public interest research organizations.
4. Government/Public Administration — such as boards of selectmen, board of county commissioners, state or federal legislature, planning boards, assessors.
5. Community Development — such as community centers, settlement houses, community action agencies, department of community affairs, League of Women Voters, recreation departments, Urban League.
6. Cultural — such as museums, libraries, music organizations, arts organizations, historical societies.
7. Charitable — such as private foundations, charitable trusts.

8. Media — such as newspapers; magazines; radio; commercial, public, cable, or closed-circuit television.
9. Social Services/Social Welfare — such as welfare departments; day care organizations; Children's Protective Services; organizations for the disabled; aging councils; home care corporations; elderly or low-income housing units; councils of social agencies; Title VII elderly nutrition program; Headstart; Office for Children; women's centers; Women, Infants, and Children project; family service organizations; tenants associations; Division of Youth Services, Salvation Army.
10. Education — such as public or private schools; community, two-year, or four-year colleges; educational collaboratives; parent-teacher organizations; state department of education.
11. Employment/Labor/Training — such as Comprehensive Employment and Training Act (CETA); Youth Conservation Corps; Division of Employment Security; youth employment programs; labor unions, migrant workers organizations.
12. Natural Resource/Environmental Quality -- such as department of fisheries and game; conservation commissions; department of environmental quality engineering; office of environmental affairs; regional planning agencies; Environmental Protection Agency; land use commissions; river watershed organizations; U.S. Army Corps of Engineers; harbor study council; Massachusetts Audubon Society; Massachusetts Conservation Law Foundation; Soil Conservation Service.
13. Health Services/Health Education — such as New England Dairy and Food Council; health education organizations; family planning organizations; homemaker home health aide organizations; clinics; hospitals; Visiting Nurse Association; boards of health; nursing homes; regional health planning agencies; poison control centers; Red Cross; LaLeche League; mental health agencies; halfway houses.
14. Law/Justice/Legal Services — such as legal services; civil rights organizations.
15. Religious — such as churches, synagogues.
16. Youth — such as Boy and Girl Scouts, Boys' and Girls' clubs, Future Farmers of America, Future Homemakers of America, Camp Fire, Big Sister, Big Brother, youth camping associations.

17. Leisure — YMCA, YWCA, fair associations.
18. Fraternal/Ethnic/Veteran — such as masonic organizations, Veterans of Foreign Wars, National Association for the Advancement of Colored People.

Reasons for Interaction Code

Eighteen categories were used for recording responses regarding the reasons for interacting with organizations:

1. Advisory — to advise or consult on an issue; to sit on a board.
2. Advocacy — to carry out activities in support of an issue including eliciting support for legislation.
3. Affirmative action — to fulfill affirmative action requirements of CES or other organization.
4. Clientele — to reach a new or particular clientele; to expand numbers of clientele; to make referrals.
5. Information sharing — to exchange information between Extension and other organization.
6. Mutual goals — to collaborate on the basis of similar philosophies, objectives, goals.
7. Organizational maintenance — to carry out routine administrative matters.
8. Personal interest — to fulfill a personal interest in working with other organizations.
9. Personal/professional growth — to meet needs for personal or professional growth and development.
10. Personnel administration — to carry out administrative activities related to hiring, wages, benefits.
11. Program planning/delivery — to participate in planning and/or conducting educational programs or exhibits; to teach.
12. Promotion/public relations — to carry out activities related to promotion or public awareness of Extension, public relations, good will.

13. Representation — to represent or serve as liaison for Extension with other organization.
14. Resources: financial — to seek financial resources.
15. Resources: other — to seek other resources including staff, program materials, use of facilities.
16. Services: planning/delivery — to assist in planning, developing, or providing community services such as health services, counselling services, solid waste disposal, etc.
17. Technical assistance — to provide technical information.
18. Other.

Reasons for Effectiveness/
Ineffectiveness Code

The third coding system involved 25 factors associated with perceptions of why the interaction was effective or ineffective.

1. Changed practices/used information — clientele showed evidence of changed behavior or use of information.
2. Clientele: new/needs — reached new clientele; met clientele needs; met affirmative action requirements.
3. Expertise: organization — CES had expertise.
4. Expertise: personal — Extension worker had expertise; contributed to professional growth.
5. Feedback: good — received positive qualitative response in terms of oral and/or written feedback or request for further collaboration.
6. Feedback: poor — received negative qualitative response in terms of oral and/or written feedback or no request for future collaboration.
7. Goals accomplished — met personal, organizational, or program goals.
8. Goals not accomplished — did not meet personal, organizational, or program goals.

9. Lack changed practices — clientele showed no evidence of changing behavior or using information; lacked evaluation to measure change.
10. Lack mutuality: organization — was lack of understanding, rapport, or differing philosophies between Extension and the other organization; other organization unwilling to acknowledge contribution of Extension.
11. Lack mutuality: personal — was lack of understanding, rapport, or differing philosophies between Extension worker and contact person from other organization.
12. Lack resources: financial/staff/time — did not have or failed to acquire financial support or staff; did not have time.
13. Mutuality: organization — was mutual understanding, rapport, or similar philosophies between Extension and other organization.
14. Mutuality: personal — was mutual understanding, rapport, or similar philosophies between Extension worker and the contact person from the other organization.
15. New relationship — opened a new contact or relationship with other organization.
16. Priority: high — had high organizational or personal priority.
17. Priority: low — had low organizational or personal priority.
18. Public image — enhanced the public image or public awareness of the Extension Service; developed good will.
19. Resources: financial/staff/time — had available or acquired financial support, staff, or time.
20. Response: good — received positive quantitative response in terms of numbers of people or followthrough by other organization.
21. Response: poor — received negative quantitative response in terms of numbers of people or followthrough by other organizations.
22. Responsibilities: clear — had clearly stated or understood responsibilities of Extension and other organization.

23. Responsibilities: unclear — lacked clearly stated or understood responsibilities of Extension and other organization.
24. Other.
25. No reason — lacked enough contact to make a judgment.

Reasons for Noninteraction Code

The final code pertained to factors associated with noninteraction with certain types of organizations.

1. Controversial — organization type or issues with which it is concerned are controversial.
2. Differing goals/philosophy: Extension — goals and philosophies differ between Extension and other organization.
3. Differing goals/philosophies: personal — goals and philosophies differ between Extension worker and other organization type.
4. No contact — had no contact with that type of organization; had no contact this year.
5. No expertise: Extension — Extension lacks expertise to work with that type of organization.
6. No expertise: personal — Extension worker lacks expertise.
7. No request — received no request for assistance.
8. Not part of job — is not part of job assignment.
9. Others in Extension — other staff in Extension has contact.
10. Priority — work with that type of organization is of low or no priority.
11. Resources: financial/staff/time — financial support, staff, or time was not available.
12. Unlawful — it is not legal to work with that type of organization.
13. Other.

The problems with categorizing data are discussed by Selltiz, Wrightsman, and Cook (1976) and the point is made that each set ". . . must be based on a single classificatory principle, the categories must be mutually exclusive, and they must be exhaustive" (p. 476). The organization type code developed for this research is a case in point. After consultation with CES staff it was decided that a coding system based on the "subject matter" orientation of the organization, i.e., health, agriculture, natural resources, etc., was most appropriate for this study since the subjects, in their educational work, tended to think in "subject matter" terms.

Another approach to the classification system might have been based on the funding source — public (federal, state, county, local); private; and voluntary. In spite of the fact that editing was done after five consultations and four pilot interviews with CES staff, it still may be possible to take issue with some points in the code that was developed.

Effectiveness Rating

Respondents were asked to rate the effectiveness of their primary reason for interaction on a Likert-type scale ranging from one, very ineffective, to five, very effective.

Questionnaire

Demographic data were gathered by having the subject complete a questionnaire (see Appendix E).

Data Collection and Recording

Interviews were conducted by the author in a six-week period. They ranged in length from 45 minutes to two hours. All responses were recorded on the Interview Schedule (see Appendices C and D) except for the demographic data which the subject provided on a questionnaire (see Appendix E) at the conclusion of the interview.

To check for the reliability of the author's interpretation and subsequent coding of the response, the author repeated the response to the subject in the code terminology. This step helped to verify the author's interpretation of the verbatim response to the coded response.

The subjects were encouraged to refer to date books, calendars, or other information to assist in recall.

Data Processing and Analysis

The variables were analyzed with frequency counts and cross-tabulations (contingency tables). In the case of the reasons for interaction and reasons for effectiveness/ineffectiveness, cross-tabulations were done both for the primary reasons and for all reasons i.e., primary, secondary, and tertiary reasons combined.

The scores for the effectiveness of interactions were averaged to produce a mean effectiveness rating for each type of organization and each type of interaction.

A chi-square test of independence was conducted to determine whether a relationship existed among the variables used to describe CES as a collective: proportion of county population that is urban,

size of county population, and full-time county professional CES staff on permanent appointment and on temporary appointment. The same test was used to determine whether a relationship existed among any combination of six variables used to describe members of CES: sex, age, job assignment, tenure in current job, and major area of training at undergraduate and graduate level.

Methodological Assumptions

The problem of interviewer bias—that is, "systematic differences from interviewer to interviewer or, occasionally, systematic errors on the part of many or even all interviewers" (Kornhauser & Sheatsley, 1976)—was controlled in this study since the author conducted all of the interviews. In addition, since the study is descriptive rather than predictive, i.e., no particular relationships were hypothesized, it is unlikely that any theoretical bias on the part of the interviewer influenced the obtained results.

The author also had the advantage of being familiar with terminology commonly used in Extension—such as "changed practices," "commodity organizations," "clientele needs," and "organization maintenance"—which aided the coding and verification of responses during the interview.

The reporting of the methodology used in the research concludes here. The findings of the research are reported in the next chapter.

C H A P T E R I V
FINDINGS OF THE RESEARCH

The findings are reported in the same pattern as established earlier with the first section being characteristics of the organization as a collective and the second section being characteristics of members of the organization. New contacts made by Extension staff, reasons for noninteraction, and perceptions of needs for in-service training and other forms of support comprise the last section.

Characteristics of the Organization
as a Collective

Overall, the 47 respondents cited 2,861 contacts with different organizations in a one-year period with an average of 60 organizations per Extension worker. The organization types and their frequency of mention appear in Table 3. Business organizations are the most frequently mentioned type followed by Education, Natural Resource, Government, and Social Service. All organization types in the coding system are cited at least nine times.

The results that follow are for all respondents [County Directors, Agriculture, Home Economics, 4-H Youth Work, and Community Resource Development (CRD) agents] combined.

Table 3
 Percentage of Organizations
 Mentioned by Type
 N=47

Type	Times Mentioned	Percent
Business	412	14.4
Education	352	12.3
Natural Resource	285	10.0
Government	259	9.1
Social Service	244	8.5
Agriculture	201	7.0
Media	201	7.0
Community Development	184	6.4
Religious	168	5.9
Cultural	129	4.5
Health	125	4.4
Leisure	118	4.1
Employment	70	2.4
Youth	46	1.6
Charitable	22	.8
Fraternal	19	.7
Consumer Protection	17	.6
Legal	9	.3
Total	2,861	100.0

Organization Types and the Reasons for Interaction

The primary reasons for interaction by organization type appear in Table 4. The reasons given as primary reasons and all reasons (primary, secondary, and tertiary reasons combined) are highly correlated. To simplify reporting, only the primary reasons are reported here and all reasons for interaction are reported in Appendix F.

Business.—In contacts with Business organizations, the reasons for interaction center on technical assistance (22.6%), program planning/delivery (21.6%), and acquisition of financial resources (19.9%).

Education.—Over 70% of the contacts with Education organizations are for program planning/delivery purposes.

Natural Resource.—Contacts with Natural Resource organizations are concerned with technical assistance (32.6%), information sharing (25.6%), and program planning/delivery (15.1%).

Government.—Interaction with Government agencies similarly clusters around technical assistance (17.4%), program planning/delivery (17.8%), and information sharing (17.4%).

Social Service.—The predominant activity with Social Service organizations is program planning/delivery (69.7%).

Agriculture.—Program planning/delivery (21.4%), information sharing (24.4%), and advisory (17.9%) comprise the major effort with Agriculture organizations.

Table 4
Percentage of Primary Reasons for Interaction by Organization Type
N=47

Organization Style	Times Mentioned	Primary Reasons for Interaction									
		Advisory %	Advocacy %	Affirmative Action %	Clientele %	Information Sharing %	Mutual Goals %	Org. Maint./ Personnel Administ.* %	Pers. Int./ Professional Growth** %	Program Planning/ Delivery %	
Business	412	7.5	0	0	2.2	14.3	0	0	.2	21.6	
Education	352	1.4	0	0	0	4.3	0	.6	0	71.0	
Natural Resource	285	12.6	0	0	.4	25.6	.4	0	0	15.1	
Government	259	8.5	1.2	0	1.5	17.4	0	2.3	0	17.8	
Social Service	244	3.3	0	0	6.1	12.3	0	0	.4	69.7	
Agriculture	201	17.9	0	0	2.0	24.4	1.5	0	1.0	21.4	
Media	201	0	0	0	6.5	19.9	0	0	0	20.9	
Community Development	184	7.6	0	0	0	25.5	0	0	0	37.0	
Religious	168	0	0	0	0	0	0	0	0	76.8	
Cultural	129	.8	0	0	3.1	4.7	0	0	0	62.8	
Health	125	12.8	0	0	1.6	12.0	0	0	1.0	44.0	
Leisure	118	11.0	0	0	8.5	1.7	.8	0	0	19.5	
Employment	70	0	0	0	1.4	10.0	0	0	0	5.7	
Youth	46	4.3	0	0	0	6.5	2.2	0	0	28.3	
Charitable	22	4.5	0	0	0	0	0	0	0	13.6	
Fraternal	19	0	0	0	0	0	0	0	5.3	89.5	
Consumer Protection	17	23.5	0	0	5.9	35.3	0	0	0	17.6	
Legal	9	0	0	0	11.1	22.2	0	0	0	11.1	
TOTAL	2,861										

*Organization Maintenance and Personnel Administration were combined because they represent a small percentage of total responses.

**Personal Interest and Professional Growth were combined because they represent a small percentage of total responses.

Table 4 (Continued)
 Percentage of Primary Reasons for Interaction by Organization Type
 N=47

Organization Types	Times Mentioned	Primary Reasons for Interaction						
		Promotion/ Public Relations %	Represen- tation %	Resources: Financial %	Resources: Other %	Service Planning/ Delivery %	Technical Assistance %	
Business	412	5.3	.2	19.9	4.6	1.5	22.6	
Education	352	1.7	.3	0	9.4	2.6	8.8	
Natural Resource	285	0	3.2	3.5	3.9	2.8	32.6	
Government	259	12.4	0	16.2	1.5	3.9	17.4	
Social Service	244	0	.4	0	.8	4.1	2.9	
Agriculture	201	7.0	3.5	12.4	1.5	2.0	5.5	
Media	201	51.7	0	0	0	0	1.0	
Community Development	184	4.3	.5	0	3.8	1.6	19.6	
Religious	168	0	3.6	0	13.7	.6	5.4	
Cultural	129	14.7	.8	0	9.3	2.3	1.6	
Health	125	.8	2.4	.8	4.0	8.8	12.0	
Leisure	118	10.2	0	.8	3.4	0	44.1	
Employment	70	0	0	28.6	45.7	4.3	4.3	
Youth	46	39.1	0	0	2.2	0	17.4	
Charitable	22	0	0	59.1	0	0	22.7	
Fraternal	19	0	0	0	5.3	0	0	
Consumer Protection	17	0	0	0	5.9	5.9	5.9	
Legal	9	0	0	11.1	0	11.1	33.3	
Total	2,861							

Media.—Promotion/public relations is cited as the main reason for having contact with Media organizations (51.7%). It is followed by program planning/delivery (20.9%) and information sharing (19.9%).

Community Development.—Most of the contact with Community Development organizations is for the purposes of program planning/delivery (37.0%) and information sharing (25.5%).

Religious.—More than three-fourths of the contacts with religious organizations are for the purpose of program planning/delivery.

Cultural.—Among the reasons for having contact with Cultural organizations, program planning/delivery (62.8%), promotion/public relations (14.7%), and acquisition of other resources are mentioned most frequently.

Health.—Contact with Health organizations is mainly for program planning/delivery purposes (44.0%), but advisory work also is cited (12.8%).

Leisure.—Technical assistance (44.1%) and program planning/delivery (19.5%) are mentioned most frequently in contacts with Leisure organizations.

Employment.—Contacts with Employment organizations cluster around acquisition of financial (28.6%) and other resources (45.7%).

In addition to considering the types of organizations and primary reasons for interaction in Table 4, it also is important to note that certain primary reasons for interaction are mentioned

very infrequently. The most notable of these is affirmative action which is not mentioned at all as a primary reason for interaction (see Table 4) and is mentioned very infrequently among all reasons (see Appendix F). This is an important finding of the research because affirmative action refers to the organization's legal requirement to reach particular clientele groups distinguished by race, sex, or ethnic origin. Implications of the finding are discussed in Chapter V.

Primary Reasons for Interaction

When considering all the types of interaction in which Extension workers are involved in carrying out their work, certain types of interaction are carried out more frequently than others. The four most frequently mentioned primary reasons for interaction appear in Table 5. To avoid reporting many small percentages, the data are reported for only nine types of organizations.

Program planning/delivery, the most frequently cited primary reason for interaction, is associated most often with Education, Social Service, and Religious organizations.

Technical assistance is provided mainly to Business, Natural Resource, and Leisure organizations.

Information sharing activities are carried out primarily with Natural Resource, Business, and Agriculture organizations.

The acquisition of both financial and other resources is conducted mainly with Business, Employment, and Government organizations.

Table 5
 Primary Reasons for Interaction
 Cited Most Frequently
 N=47

Primary Reasons for Interaction					
		Program Planning/ Delivery	Technical Assistance	Information Sharing	Acquisition of Financial and Other Resources
		%	%	%	%
% of total primary reasons		37.7	14.5	13.9	12.3
Organization Type	Times Mentioned	%	%	%	%
Education	352	23.1	7.5	3.8	20.9
Social Service	244	15.7	1.7	7.5	1.3
Religious	168	11.9	2.2	0	14.6
Business	412	8.2	22.4	14.8	54.1
Natural Resource	285	4.0	22.4	18.3	12.1
Leisure	118	2.1	12.5	.5	3.0
Agriculture	201	4.0	2.6	12.3	14.7
Employment	70	.4	.7	1.8	30.6
Government	259	4.3	10.8	11.3	24.0

Note: Percentages are based on 2,861 organizations mentioned.

Frequency of Interaction by Organization Type

The frequency of interaction with other organizations is shown in Table 6. With more than half of the organizations mentioned, Extension workers have contact only one to two times per year. Very frequent contact—more than once per week—is with Business, Employment, Government, and Agriculture organizations.

Effectiveness of Interaction

Given the primary reason mentioned for having contact with an organization, subjects rated the effectiveness of the interaction on a Likert-type scale ranging from one—very ineffective—to five—very effective. Mean ratings were calculated and categorized: 1.0-1.9, very ineffective; 2.0-2.9, moderately ineffective; 3.0-3.9, moderately effective; and 4.0-5.0, very effective. With all organization types mean effectiveness ratings (see Appendix G) are from moderately effective to very effective with the highest ratings given to Cultural ($\underline{M}=4.42$), Health ($\underline{M}=4.27$), and Youth organizations ($\underline{M}=4.24$). The lowest ratings are given to interactions with Employment ($M=3.67$), Community Development ($\underline{M}=3.67$), and Charitable organizations ($\underline{M}=3.73$).

Similarly, the reasons for interaction are in the moderate to very effective range (see Appendix H). The highest mean effectiveness ratings are given to interactions concerned with mutual goals ($\underline{M}=5.00$), personnel administration ($\underline{M}=4.40$), and clientele ($\underline{M}=4.33$). The lowest ratings are given to organization maintenance ($\underline{M}=3.33$),

Table 6
 Frequency of Interaction
 by Organization Type
 N=47

		Contacts per Year					
		1-2 Times	3-6 Times	7-12 Times	13-14 Times	25-52 Times	53 plus Times
		%	%	%	%	%	%
% of Total		51.7	25.8	12.9	4.3	4.5	.8
Organization							
Type	Times Mentioned	%	%	%	%	%	%
Business	412	13.4	18.8	13.9	11.5	3.9	20.8
Education	352	15.5	10.7	5.4	17.2	1.6	0
Natural Resource	285	8.6	7.0	17.1	12.3	19.5	12.5
Government	259	9.7	5.1	12.2	4.1	18.8	16.7
Social Service	244	9.6	9.1	6.3	5.7	3.9	0
Agriculture	201	3.7	9.7	9.2	13.9	14.8	16.7
Media	201	4.7	6.8	10.6	8.2	25.0	4.2
Religious	168	10.6	.9	1.1	0	0	0
Employment	70	.9	2.7	5.7	5.7	3.1	20.8
All Others	669	23.4	28.9	18.5	21.3	9.4	8.4
Total	2,861						

representation ($\underline{M}=3.77$), and service planning/delivery ($\underline{M}=3.80$) interactions.

Reasons for Effectiveness/Ineffectiveness of Interactions

The data here are reported in a similar manner to the reasons for interaction. That is, the primary reasons for effectiveness/ineffectiveness of the interaction are reported in Table 7 and all reasons for effectiveness/ineffectiveness (primary, secondary, and tertiary reasons combined) appear in Appendix H.

Mutuality with the other organization is cited most frequently (18.3%) and is followed by changed practices (11.9%) and good feedback (9.3%). Some of the findings are elaborated below.

Business.—The primary reasons cited for effectiveness/ineffectiveness with Business organizations is changed practices and acquisition or availability of resources: financial/staff/time.

Education.—Reasons for effectiveness with Educational organizations clusters around changed practices, good feedback, and clientele.

Natural Resource.—Mutuality of the organizations and changed practices (25.3%) are cited in work with Natural Resource organizations. About 14% of the responses also indicated lack of changed practices.

Government.—Contact with Government agencies also clusters around changed practices and mutuality of the organizations.

Table 7
 Percentage of Primary Reasons for Effectiveness/Ineffectiveness of Interactions
 N=47

Organization Type	Times Mentioned	Primary Reasons for Effectiveness/Ineffectiveness										
		Changed Practices %	Clientele %	Expertise: Organiz./Personal* %	Feedback: Good %	Feedback: Poor %	Goals Accomplished %	Goals not Accomplished %	Lack Changed Practices %	Lack Mutualiz. Organiz. %	Lack Mutualiz. Personal %	Lack Resources %
Business	412	19.4	2.7	0	4.6	.2	8.7	3.9	0	10.4	0	1.0
Education	352	12.5	15.1	.3	23.0	3.7	7.4	1.7	4.5	2.6	1.7	1.4
Natural Resource	285	25.3	1.1	1.4	1.8	.4	10.5	2.5	14.0	10.2	2.8	1.8
Government	259	25.5	1.5	6.2	1.5	3.5	6.6	.4	4.6	.8	.4	.4
Social Service	244	6.1	5.7	.4	6.1	.8	5.3	5.7	13.5	15.2	1.6	0
Agriculture	201	4.0	7.0	1.5	5.0	.5	10.0	3.0	.5	8.0	1.5	1.0
Media	201	2.5	13.9	2.0	19.4	2.0	8.0	0	3.0	4.5	.5	0
Community Development	184	2.2	1.6	0	10.9	.5	15.8	1.6	2.7	33.3	3.8	0
Religious	168	.6	38.1	0	19.0	0	8.3	0	0	3.6	0	0
Cultural	129	1.6	0	0	6.2	0	14.0	0	0	0	0	0
Health	125	19.2	.8	3.2	7.2	1.6	4.8	3.2	3.2	3.2	1.6	1.6
Leisure	118	5.9	9.3	0	11.9	2.5	5.9	0	5.9	5.1	.8	0
Employment	70	4.3	4.3	0	0	0	10.0	1.4	0	18.6	1.4	8.6
Youth	46	6.5	6.5	0	6.5	0	4.3	0	2.2	0	2.2	2.2
Charitable	22	13.6	0	4.5	4.5	0	9.1	4.5	0	0	0	4.5
Fraternal	19	0	5.3	0	15.8	0	0	0	10.5	15.8	0	0
Consumer Protection	17	5.9	0	0	11.8	0	11.8	0	5.9	0	0	0
Legal	9	22.2	0	0	11.1	11.1	0	0	0	33.3	0	11.1
TOTAL	2,861	11.9	7.4	1.2	9.3	1.3	8.6	2.1	4.5	8.4	1.2	1.0

*Expertise: organization and Expertise: personal were combined because they represent a small percentage of total responses.

Table 7 (Continued)

Percentage of Primary Reasons for Effectiveness/Ineffectiveness of Interactions

N=47

Organization Type	Times Mentioned	Primary Reasons for Effectiveness/Ineffectiveness											Other/No Reason* %	
		Mutuality: Organization %	Mutuality: Personal %	New relationship %	Priority: High %	Priority: Low %	Public Image %	Resources: \$\$/staff/Good %	Response: Good %	Response: Poor %	Responsibilities: Clear %	Responsibilities: Unclear %		
Business	412	16.3	1.7	2.2	0	.2	4.1	18.7	2.4	2.2	0	0	0	1.2
Education	352	9.7	1.7	.3	0	0	5.1	3.4	4.3	1.4	0	0	0	.3
Natural Resource	285	21.8	1.4	.4	0	.7	0	2.1	.4	.4	0	0	0	1.5
Government	259	19.3	4.6	.8	.8	0	4.2	10.8	2.7	5.0	0	0	0	.4
Social Service	244	15.6	1.6	.8	0	2.0	.4	1.6	13.1	1.2	2.0	.4	0	.4
Agriculture	201	37.3	6.0	0	0	4.0	2.5	7.5	0	.5	.5	0	0	0
Media	201	11.4	3.0	0	0	.5	9.5	0	13.4	6.5	0	0	0	0
Community Development	184	6.6	2.2	.5	0	0	1.6	2.7	9.8	3.3	0	.5	0	0
Religious	168	4.8	1.8	7.1	0	3.6	0	9.5	3.6	0	0	0	0	0
Cultural	129	27.1	2.3	0	0	0	7.0	7.0	33.3	1.6	0	0	0	0
Health	125	26.4	7.2	1.6	0	.8	1.6	1.6	7.2	.8	.8	0	0	2.4
Leisure	118	28.8	.8	0	0	8.5	1.7	6.8	3.4	2.5	0	0	0	0
Employment	70	20.0	1.4	0	0	0	0	27.1	0	2.9	0	0	0	0
Youth	46	34.8	0	0	0	0	19.6	0	10.9	4.3	0	0	0	0
Charitable	22	31.8	0	0	0	0	0	27.3	0	0	0	0	0	0
Fraternal	19	36.8	5.3	0	0	0	0	5.3	0	5.3	0	0	0	0
Consumer Protection	17	35.3	11.8	0	5.9	0	0	0	0	5.9	0	0	0	5.9
Legal	9	11.1	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2,861	18.3	2.6	1.0	.1	1.2	3.4	7.3	6.2	2.2	.2	.1	.1	.5

*Other and No Reason were combined because they represent a small percentage of total responses.

Social Service.—Some differences of opinion exist about contact with Social Service organizations. Mutuality of organizations is mentioned in 15.6% of the cases and yet lack of mutuality is the primary reason in 15.2% of the cases. Lack of changed practices also is mentioned in 13.5% of the cases.

Agriculture.—In contacts with Agriculture organizations, mutuality of organizations and accomplishment of goals are mentioned most often.

Media.—Good qualitative feedback, reaching clientele, and good quantitative response are mentioned most frequently as reasons for effectiveness with Media organizations.

Community Development.—Differing reasons are cited regarding the effectiveness/ineffectiveness of contact with Community Development organizations with lack of mutuality being cited in more than one-third of the cases and yet accomplishment of goals also is cited (15.8%).

Employment.—Extension workers agree about acquisition of resources being the reason for effectiveness in work with Employment organizations. But this is followed by mutuality of the organizations (20.0%) and lack of mutuality of the organizations (18.6%).

Variables Associated with the Organization

A chi-square test of independence was performed to investigate whether a relationship existed between several variables used to

describe Extension as a collective. Positive relationships were found between permanent staff and temporary staff [$\chi^2(9) = 77.80$, $p < .01$], permanent staff and county population [$\chi^2(6) = 28.03$, $p < .01$], and permanent staff and proportion of urban population [$\chi^2(15) = 103.97$, $p < .01$]. Similarly, there was shown to be a positive relationship between temporary staff and proportion of urban population [$\chi^2(15) = 51.01$, $p < .01$] and temporary staff and county population [$\chi^2(6) = 17.76$, $p < .01$]. The final analysis indicated a positive relationship also existed between county population and proportion of urban population [$\chi^2(10) = 77.97$, $p < .01$].

County population was selected as the variable to be used in the reporting of data about CES as a collective. The variable appeared to be the most graphic for describing CES in terms of the environments in which it functions.

County population. In the most populous counties of 500,000 plus, work with Education organizations dominates (14.0%) and is followed by Business (12.9%) and Community Development (9.0%) organizations. Business organizations account for 13% of the contacts in areas with population of 100,000 to 499,999 and are followed by Education (12.4%) and Social Service (12.0%). In counties with populations of 99,999 or less, the contacts are mainly with Business (21.7%), Natural Resource (18.6%), and Government organizations (10.4%). The primary reasons for interaction all cluster around program planning/delivery, information sharing, and technical assistance.

Table 8 shows the percentage of contacts with different types of organizations by county population. Contacts with Business and Natural Resource organizations are relatively balanced across the population areas. Interactions with Education, Government, Media, Community Development, Cultural, Youth, Charitable, Fraternal, Consumer Protection, and Legal organizations are more prevalent in the most urban counties with populations of 500,000 plus. Work with Agriculture, Health, and Employment organizations is common in both the most populous and moderately populous counties. Contacts with Social Service, Religious, and Leisure organizations are most prevalent in counties with populations of 100,000 to 499,999.

Characteristics of Members of the Organization

This section describes Extension in terms of characteristics of the members, i.e., employees of the organization.

Variables Associated with Members of the Organization

A chi-square test of independence was performed to investigate the relationships among the following variables: sex, job assignment, and area of formal undergraduate and graduate training. There was a positive relationship between undergraduate and graduate area of training [$\chi^2(6) = 33.41$, $p < .01$], i.e., those with undergraduate degrees in agriculture also tended to have graduate degrees in agriculture rather than another discipline. Job assignment and sex had a positive relationship [$\chi^2(4) = 38.03$, $p < .01$], i.e., persons

Table 8
 Percentage of Contacts with Organization
 Types of County Population
 N=47

Organization Type	Times Mentioned	County Population		
		500,000 plus n=20	49,999- 100,000 n=18	99,999- or less n=9
		%	%	%
Business	412	40.3	35.0	24.8
Education	352	51.4	38.9	9.7
Natural Resource	285	37.9	31.6	30.5
Government	259	47.9	33.2	18.9
Social Service	244	28.3	54.5	17.2
Agriculture	201	41.3	43.3	15.4
Media	201	57.2	32.8	10.0
Community Development	184	63.0	17.4	19.6
Religious	168	33.3	61.3	5.4
Cultural	129	56.6	37.2	6.2
Health	125	44.0	40.8	15.2
Leisure	118	29.7	60.2	10.2
Employment	70	48.6	41.4	10.0
Youth	46	67.4	26.1	6.5
Charitable	22	63.6	22.7	13.6
Fraternal	19	68.4	15.8	15.8
Consumer Protection	17	47.1	35.3	17.6
Legal	9	66.7	22.2	11.1
Total	2,861			

working in the Home Economics division were females. A positive relationship also existed between job assignment and undergraduate training [$\chi^2(8) = 41.62, p < .01$]. One variable—job assignment—was selected for reporting the data because it describes the five structural units of CES.

There also was a positive relationship between age and tenure [$\chi^2(8) = 16.66, p < .05$]. Tenure was selected as the more appropriate variable for reporting the data because of the possible implications for the training of new and experienced staff.

The next section of the report considers characteristics of CES members in terms of two variables—job assignment (division) and tenure.

Organization Types and Reasons for Interaction by Divisions of the Organization

The Home Economics division works with more organizations than the other divisions. It accounts for 26.8% of all organizations mentioned and is followed by the Agriculture division (23.2%), Community Resource Development (19.4%), 4-H Youth Work (18.7%), and County Directors (12.0%).

The data are presented below by divisions of CES except for Agriculture and Community Resource Development (CRD) which are presented together because the four most frequently cited primary reasons for interaction are the same for both divisions.

Agriculture and CRD Divisions.—The Agriculture division has contact mainly with Business organizations (see Table 9) with the

Table 9

Organization Types and Primary Reasons for Interaction
in Agriculture and CRD Divisions

Organization	% of Total Contacts	Primary Reasons for Interaction				Advisory %
		Program Planning/ Delivery %	Information Sharing %	Technical Assistance %		
Agriculture Division ¹ n=15						
Business	19.5	27.7	25.4	23.8	18.5	
Education	15.0	73.0	0	25.0	2.0	
Agriculture	14.9	24.2	32.3	5.1	24.2	
CRD Division ² n=5						
Natural Resource	30.8	15.2	29.2	35.7	10.5	
Business	16.9	17.0	6.4	64.9	3.2	
Government	14.9	41.0	8.4	26.5	19.3	

¹Percentages are based on 665 organizations mentioned.

²Percentages are based on 556 organizations mentioned.

primary reason for interaction being program planning/delivery and information sharing. Education organizations are the second major type of organization with which the division works in primarily program planning/delivery activities. Other Agriculture organizations account for 14.9% of their contacts and these are mainly information sharing, program planning/delivery, and advisory functions.

Home Economics Division.—The Home Economics division works primarily with Social Service (see Table 10), Religious, Health, and Education organizations. Program planning/delivery is the predominant reason for interaction with all four types of organizations.

4-H Youth Work Division.—In the 4-H Youth Work division, Business organizations are cited most frequently (see Table 11) with the primary reason being acquisition of financial resources. Education organizations follow with contacts for program planning/delivery purposes. Contacts are made with Media organizations with promotion/public relations being the primary reason.

County Directors.—County Directors indicate they have most contact with Community Development organizations (see Table 12) for information sharing and technical assistance reasons. Work with Government agencies is for the purpose of acquisition of financial resources. Business organizations follow with information sharing and promotion/public relations being the primary reasons. The County Directors also have contact with about the same percentage of Agriculture organizations for promotion/public relations and acquisition of financial resources.

Table 10
 Organization Types and Primary Reasons for
 Interaction in Home Economics Division¹
 n=12

Organization Type	% of Total Contacts %	Primary Reasons for Interaction					Resources: Other %
		Program Planning/Delivery %	Information Sharing %	Advisory %	Information Sharing %	Advisory %	
Social Service	22.6	81.5	7.5	3.5	7.5	0	
Religious	14.7	87.6	0	0	11.5	11.5	
Health	11.1	54.1	12.9	11.8	4.7	4.7	
Education	10.6	74.1	12.3	2.5	8.6	8.6	

¹Percentages are based on 767 organizations mentioned.

Table 11
 Organization Types and Primary Reasons for
 Interaction in 4-H Youth Work Division¹
 n=8

Organization Type	% of Total Contacts %	Primary Reasons for Interaction			
		Resources: Financial %	Resources: Other %	Program Planning/Delivery %	Promotion/Public Relations %
Business	22.1	64.4	13.6	12.7	5.1
Education	16.6	0	15.7	77.5	0
Media	8.8	0	0	0	100.0

¹Percentages are based on 535 organizations mentioned.

Table 12
 Organization Types and Primary Reasons for
 Interaction Among County Directors¹
 n=7

Organization Type	% of Total Contacts	Primary Reasons for Interaction			
		Information Sharing %	Technical Assistance %	Resources: Financial %	Promotion/ Public Relations %
Community Development	21.6	50.0	33.8	0	10.8
Government	15.7	0	1.9	64.8	16.7
Business	10.5	36.1	2.8	11.1	19.4
Agriculture	10.2	8.6	5.7	20.0	20.0

¹Percentages are based on 343 organizations mentioned.

All Primary Reasons for Interaction. Considering all primary reasons for interaction with organizations, the Agriculture and CRD divisions are involved mainly in program planning/delivery (see Table 13), technical assistance, and information sharing. Program planning/delivery dominates in the Home Economics division and is followed by information sharing and acquisition of other resources. In the 4-H Youth Work division, the primary reasons for interaction are concerned with program planning/delivery, acquisition of financial resources, and promotion/public relations. The County Directors indicate that their main activities are for the purposes of promotion/public relations, information sharing, and acquisition of financial resources.

See Appendix I for the mean effectiveness ratings by divisions and organization types.

Organization Types and Reasons for Interaction by Staff Tenure

The staff with service in their current positions for six years or longer report working primarily with Business (see Table 14), Education, and Natural Resource organizations. To avoid reporting many small percentages, the data are reported for only eight types of organizations. Those with three to six years of service have contact primarily with Business, Education, and Community Development organizations. Staff having three years or less of service report having contact with Media, Social Service, and Agriculture organizations. Those staff members with the most service and those with the least service report interactions with an average of 62 organizations. Those in the middle

Table 13
 Primary Reasons for Interactions by Divisions
 n=47

Division	Primary Reason for Interaction					
	Program Planning/ Delivery %	Technical Assistance %	Information Sharing %	Resources: Other %	Resources: Financial %	Promotion/ Public Relations %
Agriculture	30.1	26.3	21.2	1.5	.2	2.6
CRD	33.1	31.8	16.0	3.1	1.8	2.0
Home Economics	67.9	2.3	9.8	6.4	.8	2.9
4-H Youth Work	29.5	1.7	4.7	10.7	21.9	20.7
County Directors	5.0	10.8	20.1	7.3	17.8	21.9

Note: Percentages are based on 2,861 organizations mentioned.

Table 14
 Most Frequently Mentioned Organization
 Types by Staff Tenure
 n=47

Organization		Tenure		
		3 years or less n=5	3-6 years n=7	6 or more years n=35
Type	Times Mentioned	%	%	%
Business	412	9.0	25.7	13.2
Education	352	10.0	12.8	12.5
Natural Resource	285	4.5	2.5	12.0
Government	259	4.8	9.6	9.5
Social Service	244	11.9	3.6	8.9
Agriculture	201	11.6	7.1	6.3
Media	201	13.2	6.6	6.2
Community Development	184	10.0	11.7	5.0

range with three to six years in the job work with an average of 52 organizations.

The primary reasons for interaction with other organizations by the staff with the most service are primarily for program planning/delivery, technical assistance, and promotion/public relations (see Table 15). Those with three to six years of service indicate acquisition of financial resources, program planning/delivery, and promotion/public relations as the primary reasons for interaction. Those with three years or less report program planning/delivery, promotion/public relations, and acquisition of financial resources as primary reasons.

New Contacts with Organizations, Noninteractions
with Organizations and Perceptions
of Training Needs

The final part of the report of the research has three sections which are concerned with contacts made with organizations for the first time, types of organizations with which Extension workers had no contact, and perceptions of needs for in-service training.

New Contacts with Organizations

The subjects were asked to identify one organization with which they most recently had contact for the first time. The types of organizations, percentage of contacts, and mean ratings of effectiveness of the interactions appear in Table 16. The effectiveness ratings were based on a Likert-type scale ranging from

Table 15
 Primary Reasons for Interaction
 by Staff Tenure
 n=47

Primary Reasons for Interaction	Tenure		
	3 years or less n=5	3-6 years n=7	6 or more years n=35
	%	%	%
Program Planning/Delivery	25.1	20.2	42.4
Technical Assistance	2.6	9.3	17.1
Promotion/Public Relations	24.8	13.4	5.0
Resources: Financial	9.0	20.5	4.2

Note: Percentages are based on 2,861 organizations mentioned.

one—very ineffective—to five—very effective. Mean ratings were calculated and categorized: 1.0-1.9, very ineffective; 2.0-2.9, moderately ineffective; 3.0-3.9, moderately effective; and 4.0-5.0, very effective.

The largest percentage of contacts are again with Business organizations, but Employment organizations move from position thirteen among all contacts (see Table 3) to a shared first position in new contacts (see Table 16). There are no new contacts cited with Media, Consumer Protection, Legal, Religious, Youth, or Leisure organizations.

Among the primary reasons for interaction, program planning/delivery (36.2%), advisory (14.9%), technical assistance (14.9%), and acquisition of other resources (12.8%) are cited.

Mutuality of the organizations (19.1%), goals accomplished (14.9%), and availability or acquisition of resources (12.8%) are cited as the primary reasons for effectiveness.

The Agriculture division has most of its new contacts with Employment organizations (n=5); CRD with Natural Resource organizations (n=4); Home Economics with Health organizations (n=5); and County Directors with Business organizations (n=2). The 4-H Youth Work division does not report more than one of any type of organization with which there is new contact.

Noninteraction with Organization Types

After the subject had identified all of the types of organizations with which s/he had had contact, the interviewer went back

Table 16
 Percentage of New Contacts with Organization
 Types and Mean Effectiveness Ratings
 n=47

Organization Type	Times Mentioned	New Contacts %	Mean Effectiveness Rating %
Business	7	14.9	4.14
Employment	7	14.9	4.29
Education	6	12.8	3.67
Agriculture	5	10.6	4.40
Social Service	5	10.6	4.40
Natural Resource	5	10.6	4.20
Health	5	10.6	4.00
Community Development	4	8.5	4.25
Government	1	2.1	4.00
Cultural	1	2.1	5.00
Fraternal	1	2.1	3.00

over the types of organizations which the subject had not mentioned and asked why there had been no interaction with that type of organization.

Noninteraction with types of organizations is reported most frequently with Fraternal (12.1%), Legal (12.1%), Charitable (10.6%) and Consumer Protection (9.7%) organizations. Extension workers have an average of seven types of organizations with which they do not interact.

See Table 17 for the reasons given for not interacting with certain types of organizations. Two reasons predominate among all the reasons cited. Either the Extension worker does not come into contact with that type of organization or s/he believes that another Extension worker probably has contact with that type of organization.

Table 17
Percentage of All Reasons
for Noninteraction
N=47

Reason for Noninteraction	Percent
No contact	45.6
Others in Extension	34.4
No request	7.9
Not part of job	4.8
Different organizational goals	2.1
Extension lacks expertise	2.1
Lack financial, staff, or time resources	1.2
Unlawful	.9
Personally lack expertise	.6
Controversial	.6
Other	2.1

Note: Percentages are based on 326 organizations mentioned.

Perceptions of Needs for In-Service
Training and Other Forms of Support

Subjects were asked to indicate their needs for in-service training or other forms of support which would improve their effectiveness in working with other organizations. The results are summarized below with the number of respondents indicating the need in parentheses.

In-service training.—The responses cluster in eight areas of need:

1. Community - how to identify leaders in town/community (1)
 - how to tap community resources and use to best advantage (1)
 - how to contact other agencies (1)
 - how to increase citizen participation in local issues (2)
 - how to know the political realities of a community including the process for working with a community and decision makers (1)
2. Clientele - how to work with clientele served by mental health agencies; our staff has no training for that type of clientele (1)
 - how to work with the physically disabled (1)
3. Decision-makers - methods for contacting and making presentations to legislators (1)
4. Communications - public speaking skills (2)
 - promotion techniques (2); visibility campaign (1)
 - work with media (2)
5. Subject matter - home economics subject matter training (1)
 - business management training for advising growers (1)
6. Philosophy - new workers need guidance in Extension philosophy and mission in working with other organizations (1)
7. Grantsmanship - train county staff in grantsmanship (1)

8. Other
- mandate refresher courses for Extension staff with financial support provided (1)
 - do not need in-house training; staff should go outside of Extension for training (1)

Other Forms of Support.—Needs expressed for other forms of support cluster in six areas:

1. Additional State Staff
 - specialist support for new program trusts (1)
 - liaison person to make contact with state level of other organizations (4) and legislators (1)
 - liaison person to make linkages with other units of the University (1)
 - liaison person to work with federal level to get Extension written into legislation to establish linkages with other government units
 - grantsman or proposal writer to assist county staff (3)
2. Additional County Staff
 - more administrative staff at county level (5)
3. Publications
 - brochure to describe Extension as a total organization (1) and promoting idea of 4-H as the youth approach to Agriculture, Home Economics, and CRD (1)
 - brochures suggesting the linkage of "Extension and. . ." (2)
 - provide camera-ready copy of brochures that can be easily reproduced locally for potential agency clientele (1)
4. Directory
 - directory or index of organizations, their purposes, and contact persons (4)
5. Financial
 - budget for programs and the responsibility for making allocations and expenditures (1)
6. Policy
 - remove regulatory programs from our scope of responsibility (1)
 - guidelines for Extension's role in joint programming with other organizations (2) especially with those agencies that frequently request our assistance in training their paraprofessional staff (1)

- guidelines for recourse available when Extension is written into another organization's proposal without our knowledge (1)
- clearer stance and policy at the state level about new program thrusts (1)
- guidelines for involvement of county staff in statewide advisory committees with other organizations; how much representation should Extension have (1)

The findings of the research conclude at this point. The final chapter includes a summary of the results, discussion, and recommendations. In addition, the author highlights the implications of the research for management of the Cooperative Extension Service and for boundary spanning theory. The chapter concludes with an epilogue.

C H A P T E R V
SUMMARY, DISCUSSION, RECOMMENDATIONS,
IMPLICATIONS, AND EPILOGUE

Summary

Of 18 different types of organizations with which CES has contact, the majority of interactions are with Business, Education, Natural Resource, Government, Social Service, Agriculture, and Media organizations. Given the primary reason and all reasons for interaction, the majority of the contacts are for program planning/delivery, technical assistance, and information sharing purposes. The fourth major reason is for the acquisition of financial and other resources.

With more than three-fourths of the organizations mentioned, contacts are made one to six times per year. The most frequent contacts, more than once per week, are made with only .8% of the organizations and these are primarily Business, Employment, Agriculture, and Government organizations.

Extension staff give highest effectiveness ratings to work with Cultural, Health, and Youth organizations. Considering those organization types with which they have the most contact, interactions with Business and Education organizations are given very effective ratings and Natural Resource organizations receive moderately effective ratings. Considering those reasons mentioned

most frequently, program planning/delivery receives very effective ratings and technical assistance and information sharing are at the moderately to very effective point. Reasons for perceiving the interactions to be effective are based primarily on mutuality of the organizations, changed practices, and good feedback.

In the most urban counties, contacts are concentrated with Education, Business, and Community Development organizations; moderately urban counties work with Business, Education, and Social Service organizations; and rural counties have interactions primarily with Business, Natural Resource, and Government organizations.

Extension workers indicate that new contacts are made primarily with Business, Employment, and Education organizations for the purposes of program planning/delivery, technical assistance, and acquisition of other resources. Reasons for effectiveness are based on mutuality of the organizations, accomplishment of goals, and acquisition of resources.

Fraternal, Legal, Charitable, and Consumer Protection organizations are mentioned most frequently as those with which Extension workers have no contact.

Perceptions of needs for in-service training focus on: (1) understanding and developing a process for working with the social-political dynamics of the community; and (2) developing more effective communication skills. Perceptions of needs for other forms of support center on liaison staff to develop linkages with other organizations at state level; state grantsman; county administrative

staff; publications; organization directory; and policy formulation and clarification.

Discussion

Discussion of the results is presented in seven parts: nature of the CES environment; factors associated with boundary spanning in CES; reasons for interaction, effectiveness, and reasons for effectiveness; interactions by size of county population; interactions by CES divisions; interactions by staff tenure; and CES noninteraction with organization types.

Nature of the CES Environment

The data suggest that the task environment with which CES has interaction is heterogeneous and dynamic (Thompson, 1967). It is a heterogeneous task environment because CES as an organization is working with 18 different types of organizations. In addition, a CES staff person may have contact with an average of 60 organizations in one year from as often as more than one time per week to one time per year. These conditions suggest a dynamic task environment and one that is lacking in routine activities such as was found in a health and welfare organization (Leifer & Wortman, Note 8).

Researchers also have noted the implications the changing environment has for organizations (Blau & Scott, 1962; Ohlin, 1958). The Cooperative Extension Service is no exception. Although work with specific organizations is not documented from the early years, it is known that formal relationships have existed with other USDA

agencies such as Soil Conservation Service and the Farmers Home Administration since the 1930's (Hardin, 1955). Although there are still formal connections with these organizations, there are as many or more contacts with Business, Education, Government, Social Service, and Media organizations. This suggests that Extension has expanded and diversified the environment with which it works. Obviously Extension has the ability to establish symbiotic relationships with other organizations, but further research is needed to determine the processes by which this is done.

Factors Associated with Boundary Spanning in CES

The predominant function of the boundary spanning activity of CES, as would be expected of an educational organization, is concerned with providing educational information to other organizations either in the form of program planning/delivery or technical assistance. These factors are allied to the transacting function (Adams, Note 6; Miles, in press) which involves the disposal of outputs (educational programs and technical assistance, in this case). The program planning/delivery and technical assistance functions also are related to Donnelly's (1977) factors affecting interorganizational relations. Two classifications of his factors—"capacities" and "opportunities to cooperate"—address the internal capability of the organization to provide needed resources and the receptivity of the environment to utilize the resources. The emphasis on program planning/delivery and

technical assistance in this study suggests that Extension staff members perceive the organization as having the capacity to provide needed outputs and that the environment is in need of and receptive to Extension's outputs.

The information sharing function, which is another major reason for boundary spanning in CES, is well noted in the literature as searching and collecting information (Adams, Note 6), information processing (Miles, in press), and general gathering of information about the environment (Aldrich & Herker, 1977; Leifer & Delbecq, 1977; Organ, 1971; Perrow, 1970; Thompson & McEwen, 1958). Information sharing is an important factor in Extension's work with other organizations for the purpose of gathering information about the needs of people and communities and environmental contingencies which might be addressed by Extension's educational resources. Concern about information sharing also underlies CES staff members' expressed needs for training in working with communities and decision-makers and improving communication skills.

The linking function for the purpose of acquiring resources (Aiken & Hage, 1968; Miles, in press) is a prominent factor associated with boundary spanning with Employment, Cultural, Business, and Government organizations. In this study, the contact with Employment organizations reflects the effort to acquire staff resources and project grants from manpower programs such as the Comprehensive Employment and Training Act (CETA); contact with Business organizations is for the purpose of acquiring financial,

program, and facility resources; contact with Cultural organizations is for use of facilities and program resources. Finally, Government contacts reflect involvement with county commissioners and state legislators regarding budget appropriations for the county CES unit. The considerable contact for the purpose of acquiring additional financial, staff, facility, and program resources suggests that CES is very involved in attempting to overcome some of the budget constraints imposed by Extension's funding base (Hildreth, 1976). This effort is even more evident in new contacts with organizations where acquisition of financial and other resources is the third most frequently mentioned reason for interaction.

The representation function has been noted in the literature as a major factor associated with boundary spanning (Adams, Note 6; Miles, in press) but it is mentioned less frequently by CES staff as a primary reason (1.0%) than most other reasons. This finding suggests that CES staff members do not perceive themselves in the narrow terms of just representing their organization but consider themselves in a broader context of providing a major output (program or technical assistance) on behalf of the organization. In this context the representation factor would be implied and assumed as part of the function.

Reasons for Interaction, Effectiveness, and Reasons for Effectiveness

CES staff tend to have positive perceptions of their boundary spanning with ratings in the moderately effective to very effective range. Several points of interest emerge from these data and are discussed below.

1. CES staff rate interactions with Cultural, Health, and Youth organizations highest and yet these types of organizations account for a relatively small proportion of their total contacts. Among all reasons for having interaction with these three organization types, program planning/delivery is mentioned most frequently. More research into why interactions with these particular types of organizations are more effective is needed.

The primary reason for effectiveness with Cultural organizations—a good quantitative response—suggests that organizations such as libraries are effective ones for reaching large numbers of people with educational programs. Mutuality of goals also is frequently mentioned with all three organization types—Cultural, Health, and Youth—which indicates that these organizations are ones with which Extension has particular agreement on objectives and goals.

2. Considering those types of organizations mentioned most frequently, CES staff members consider themselves to be very effective with Business, Education, and Government

organizations where they carry out primarily technical assistance (Business) and program planning/delivery (Education and Government) functions. Work with Natural Resource organizations is in the moderately effective range in carrying out technical assistance functions. The somewhat lower effectiveness rating may have a relation to the need expressed by CES staff for more specialist support in new programs areas. Work with Natural Resource organizations tends to focus on environmental problems such as land use, water quality, energy conservation, solid waste disposal and other issues which are relatively new concerns for Extension to be addressing (Hildreth, 1976). Thus, there may be a lag between the time such needs are identified and when the appropriate technical support is available to address those needs.

In general, however, there is consistency among those types of organizations which Extension staff mention most frequently—CES staff members are providing specific outputs in the form of programs and technical assistance and they perceive their efforts as being generally very effective.

3. The lowest effectiveness rating is given to interactions with Employment organizations which account for only 2.5% of the contacts with all organizations. But, interestingly, Employment organizations are one of the two

most frequently mentioned organization types with which new contacts have been made for the first time; and rating only on the new contacts is in the very effective range. It is not clear what happened to cause those making contacts for the first time to feel their efforts toward acquiring resources are very effective while the organization as a whole rates the effort as moderately effective. In both instances acquisition of resources and mutuality of goals are cited as reasons for effectiveness. It appears that Extension as a total organization perceives its interaction with Employment organizations as successful in terms of acquiring resources but it is particularly successful among those Employment organizations with which staff has contact for the first time.

4. Extension staff perceive their most effective interactions to be those concerned with mutual goals, an important factor in boundary spanning that has been noted in the literature (Benson et al., 1973; Donnelly, 1977; Finley, 1970; Levine & White, 1961; Litwak & Hylton, 1962). A closely related factor which also is based on mutuality is domain consensus (Levine & White, 1961). It is defined as "agreement among participants regarding the appropriate role and scope of an agency" (Benson et al., 1973).

The phenomenon of mutuality of goals deserves a more in-depth analysis to determine what factors comprise

mutuality of goals and whether similar perceptions are held by the other organization.

5. The second highest effectiveness rating is given to efforts to reach new or a particular clientele although it accounts for being the primary reason for interaction in only 2.3% of the cases. It is important to note that affirmative action, which refers to the organization's legal requirement to reach particular audiences, is not mentioned at all as a primary reason for interaction. It is possible that there was difference in interpretation between the interviewer and the subjects. The interviewer, when the response was made that the interaction was to reach a new or particular clientele group, did not probe to determine whether it was specifically an affirmative action effort. Thus, it could be surmised that efforts to reach new clientele are, in part, attempts to meet affirmative action requirements although not identified as such. However, the finding suggests that CES staff do not readily identify their efforts to reach a particular clientele as an effort to meet the organization's affirmative action goals. And, when considering affirmative action and new clientele interactions together, these two reasons for interaction among all reasons cited still account for a small percentage of the total responses (see Appendix F).

6. The lowest effectiveness ratings are given to interactions concerned with organization maintenance, representation, and service planning/delivery. The organization maintenance function is mentioned so infrequently that nothing can be deduced other than it was not seen as important by CES staff. The representation function, as discussed earlier, may be defined too narrowly for CES staff who may perceive their functions in more concrete terms of providing specific program or technical assistance with representation implied in those functions. The lower effectiveness rating and low frequency of mention of service planning/delivery is similar to Soobitsky's (1971) finding that CES staff perceive themselves as educators rather than deliverers of service.
7. Work with Media organizations is perceived overall as very effective, but different reasons are cited for having contact with Media organizations. In the majority of cases promotion/public relations is cited as the primary reason for interaction (51.7%) but in other cases it is cited as an educational effort (program planning/delivery, 20.9%, and information sharing, 19.9%). Staff in 4-H Youth Work, in particular, cite promotion/public relations as the primary reason for interaction in 100% of the contacts with Media organizations.

The difference of opinion about reasons for being involved with Media organizations also carries over to the

perceived reasons for effectiveness. Most indicate good qualitative feedback as the primary reason but others also note that Media organizations are a means to reach clientele, that there is a good quantitative response, and that there is mutuality of goals. A lesser number perceive the enhancement of the public image of Extension as the primary reason for effectiveness; however, among all reasons, public image is mentioned frequently. These findings along with the expressed needs for communication training indicate that the potential of work with Media organizations as a means to reach clientele may not be fully utilized and with more training CES workers might increase their effectiveness in this area.

Soobitsky (1971) found similar perceptions among CES urban agents who identified communications as one of the two most important competency areas for job effectiveness. Communication, in his study, was concerned with individual, group, and mass media communication. The results here suggest that communications training should be further defined according to its purposes—either educational or promotional.

8. The importance of agreement on goals and objectives and domain consensus is affirmed again with mutuality of organizations being the most frequently cited reason for effectiveness. It is given as a prominent reason for effectiveness in work with Natural Resource, Government,

Agriculture, Employment, and Social Service organizations. The latter example offers an important contradiction. In the case of Social Service organizations, lack of mutuality of organizations is cited almost as frequently (15.2%) as mutuality of organizations (15.6%). Work with Community Development organizations presents a similar contradiction with lack of mutuality of goals cited in 33.3% of the cases, but accomplishment of goals also is mentioned in 15.8% of the cases.

More research is needed to ascertain why there is disagreement about objectives and goals with some Social Service and Community Development organizations and not with others. In addition, it would be helpful to have more information about why Extension workers perceive their relationships with Natural Resource, Government, Agriculture, and Employment organizations as symbiotic ones.

9. Changed practices and good feedback also are mentioned frequently as reasons for effectiveness, but it is not clear on what basis these judgments are made. Responses range from a specific use of information ("the zoning board followed my recommendations") to more general remarks about the interaction ("the head of the agency was very complimentary about the effort"). More research is needed to document change in behavior and use of information as a result of Extension's interaction with other organizations.

Interactions by County Population

There is no immediate explanation as to why in the case of Social Service organizations, there are more contacts in moderately urban areas than the most populous counties where one would expect a large number of Social Service organizations. Turk found that municipal scale and diversity and the extent to which agencies were uncontested and community-wide to be factors in relationships among hospitals (1973) and antipoverty networks (1970). Finley (1970) also identified seven community factors that were significant in interorganizational involvement. Further research is needed to determine whether the scale and diversity of organizations also might be a factor in their accessibility to one another. It may be that larger, seemingly more bureaucratic organizations in urban areas may be more difficult ones with which to establish contact.

Interactions by CES Divisions

It is difficult to draw conclusions about the data on CES divisions because of the small number of respondents across the five cells. However, some general observations are made below.

1. In the Agriculture division, it might be unexpected to find Business organizations figuring more prominently than Agriculture organizations in frequency of mention. By way of explanation, it is important to note here that the definition of Business in the organization type code includes some private enterprise with primarily an agriculture orientation. Organizations such as agribusiness,

cooperatives, farmers' markets, and banks are examples of Business organizations cited by Agriculture agents. The data do not reveal specific organizations within the category of Business, but this finding should be noted because Extension's involvement with agribusiness, in particular, has been the focus of criticism in the past (Agribusiness Accountability Project, 1972).

2. The heavy emphasis of the CRD division with Natural Resource organizations and the Home Economics division with Social Service organizations would be expected considering the subject matter areas with which each is concerned.
3. The 4-H Division reports more activity related to acquisition of financial and other resources than any of the other divisions. Most of the resource acquisition effort is with Business organizations; little activity is reported with other sources of support such as Government, Charitable, and Employment organizations. County directors also are involved in acquisition of resources but primarily with Government agencies which represent the parent funding source; little activity is reported regarding attempts to acquire resources from other public or private sources. These findings suggest that potential sources of support are not being fully utilized. However, it is unclear where the responsibility

rests for acquisition of resources. One respondent remarked that the organization needs to make a decision as to whether resource acquisition is part of the county Extension agent's responsibility or whether state specialists might more effectively perform that function.

4. Given all reasons for interaction, program planning/delivery dominates in all divisions except with the County Directors where promotion/public relations is the most frequently reported activity. It is interesting to note that even though the subjects are in managerial positions, particularly in Home Economics and 4-H Youth Work, they still are involved heavily in providing educational programs directly to the public. The question is raised whether this trend could continue as additional staff and financial resources are acquired and, thus, the managerial responsibilities increase. Obviously, this is already a concern of some staff who expressed a need for more administrative staff at the county level in order that they could be relieved of administrative responsibilities and concentrate on their educational work. This point raises another issue regarding job definition.

Interactions by Staff Tenure

The staff with six or more years of service are similar to the pattern of CES as a total organization in that they are heavily involved in program planning/delivery and technical assistance

activities with Business, Natural Resource, and Government organizations.

Although the staff with less time of service report considerable program planning/delivery activity, they also indicate that acquisition of financial resources is a major reason for interacting with other organizations. This is particularly true of those with three to six years in their jobs. It is unclear why newer staff members report more activity concerned with acquisition of financial resources, but it suggests differences in role perceptions between newer staff and staff with longer years of service. It should not be a function of role requirement since all respondents are in a management capacity in their division. These findings also indicate that further definition and clarification of roles are needed.

In addition, the dual role of CES staff members as evidenced by being involved in educational efforts and acquisition of resources, also is prominent in new contacts with organizations. This suggests that the dual role is a current phenomenon and thus further underlines the importance of definition and clarification of roles in terms of responsibilities for direct delivery of program, acquisition of resources, and managerial responsibilities.

There is no explanation why the staff with the most years of service and those with the fewest years work with more organizations than those in the three to six year range. Leifer and Wortman found differing results with this variable in a research and statistics organization where high boundary spanners had less time in their position than low boundary spanners (Note 9); but, in a health and

welfare organization, high boundary spanners were in their positions longer than low boundary spanners (Note 8).

CES Noninteraction with Organizations

Extension, as a total organization, has a broadly based organization-set with which it works given the fact that all 18 types of organizations are cited.

The main reason for noninteraction—no contact with that organization type—suggests that CES staff do not perceive themselves as having the opportunity or the reason to be in contact with some types of organizations because of the nature of the work in which they are involved. It is interesting to note that even though many report having no contact, a considerable number also indicate that they believe other Extension staff members are working with those types of organizations.

Recommendations

Following are recommendations for in-service training, other forms of support, and further research.

In-Service Training

Training needs are indicated below for both new and experienced staff.

1. Provide orientation for new staff on the importance of work with other organizations. Utilize those staff members who perceive their efforts as effective with particular organization types as trainers.

2. Conduct training on the processes for working with several organizations around a community-based problem. Consideration should be given to identification of community leadership, community resources, and citizen participation. The work by Sarason et al. (1977) and Benson (1975) on networks offers assistance in this area.
3. Conduct training in effective communications with emphasis on the mass media. Consideration should be given to mass media work for both educational and promotional purposes.

Other Forms of Support

The findings suggest other areas where specific needs exist.

1. Clarify the job definitions of county Extension agents regarding direct delivery of programs, acquisition of resources, and managerial responsibilities. Appropriate training and or staffing should follow.
2. Provide state specialist staff to furnish technical support in new program areas. The need is noted particularly by CRD staff.
3. Provide support in the information gathering effort in the form of (1) additional state staff to establish contact with other organizations on behalf of the state level of CES, and (2) computerized data bank of information on other organizations. The latter could be designed in a format similar to the computer program CES already

has available with information on public funding sources (Note 10).

Further Research

This study, which is a documentation of boundary spanning activity and effectiveness in one educational organization, indicates the need for additional research from this base.

1. Investigate the processes by which effective relationships are established with other organizations. Particular attention is needed for working on community-based problems.
2. Conduct in-depth analysis of organization relationships perceived as particularly effective by CES and determine their reciprocity. Attention could be given to Social Service and Community Development organizations where there is disagreement about the mutuality of the organizations with Extension. Consideration also could be given to whether scale and diversity of the organization is a factor.
3. Conduct evaluations of Extension programs and technical assistance efforts to document changed behavior and use of information.

Implications of the Research

The research has implications for both the management of the Cooperative Extension Service and for boundary spanning theory and research.

Implications for CES management.—Several inferences can be drawn from this research which should be of interest to Extension management.

First, clarification of roles is needed for county staff having managerial responsibilities. Presently, the Home Economics county division heads indicate having considerable activity in direct delivery of programs. Can this practice, or should this practice, continue in the future as management responsibilities increase? The position needs to be defined in terms of responsibility for management of the total county home economics program and responsibility for direct teaching. Multiple roles also are apparent in 4-H Youth Work where the county division heads are heavily involved in acquisition of resources and delivery of programs. Is it realistic (or efficient) to expect that the head of the county 4-H division can effectively carry out responsibilities for management of the program and staff, for grantsmanship, and for direct teaching? Again, clarification of responsibilities is needed to define the role of the county 4-H division head. It would follow that definition of the Agriculture and Community Resource Development roles also should be examined.

Second, if acquisition of resources is an important need within Extension (and it appears to be so from its frequency of mention), then attention needs to be given to determining who is responsible for that function and then providing the appropriate technical support.

Third, information sharing emerges as a prominent activity in Extension workers' contacts with other organizations. Management needs to recognize this important function and direct attention to how information is gathered, processed, and acted upon.

Fourth, if affirmative action is a major organizational goal, then management needs to look closely at the data from this study. There are two possible explanations for lack of mention of affirmative action. Either Extension staff are not identifying their efforts to reach a particular clientele as an affirmative action effort, or little attempt is being made to meet the affirmative action goals.

Finally, work with other organizations is the lifeblood of the Cooperative Extension Service. It appears that CES has the capacity to respond to needs in cooperation with other agencies and organizations. But all of this interorganizational activity raises other issues. Before interaction takes place with another organization, have priorities been established that indicate the need for the interaction? Does the interaction contribute to the economic and social well-being of the clientele to whom the program or service is being directed? Once that priorities and needs have been established, attention should be given to the process by which Extension works with other organizations to address clientele problems. For instance, what process would an Extension Community Resource Development (CRD) staff person use to work with other agencies in tackling the problem of inadequate health services in rural communities? What process would an Agriculture agent use

to work with local and state officials and farmers to solve the problem of disposal of sludge by recycling it for agricultural purposes? The process by which diverse groups are brought together to focus on a community problem has long been a concern of Extension workers in their roles as change agents. But with more organizations and more public interest groups, the process for solving economic and social problems has become more complex. Extension needs to examine its role as a broad-based organization and identify the step-by-step processes by which it can work with other organizations most effectively to deliver programs and services to people and communities.

The findings also have implications for boundary spanning theory and research which are discussed in the next section.

Implications for boundary spanning theory and research. This study reaffirms what has already been found in other research—that organizations concerned with human services tend to have considerable boundary spanning activity (Mintzberg, 1973; Thompson, 1967). The findings here indicate that boundary spanning is an important function for all divisions of CES at the county level.

Similarly, the importance of mutuality among organizations is in accord with the research on agreement of objectives and goals (Finley, 1970; Levine & White, 1961; Litwak & Hylton, 1962), awareness of common concerns (Litwak & Hylton, 1962), and domain consensus (Levine & White, 1961). However, the next step is needed to determine what constitutes mutuality between organizations and how symbiotic relationships are developed.

This research also indicates that an educational organization such as Extension has a diverse task environment with which it interacts. The heterogeneous, dynamic conditions of the organization's environment require greater organizational adaptability (Ohlin, 1958). Here it has been shown that one organization, indeed, does have a vast and diverse environment with which it functions. But now there is a need to look more closely at how an organization examines, adapts, and redefines its role with contemporary environments. This is a particularly critical issue for Extension which was established in an agrarian environment and now is a multi-dimensional organization in a primarily urban society.

Finally, this study has opened new areas of inquiry in boundary spanning research by considering more detailed factors associated with boundary spanning and reasons for effectiveness or ineffectiveness of interactions. This thrust has, hopefully, helped to deinstitutionalize perceptions of one organization by portraying it as a collective of vibrant human beings engaged in common purposes and goals.

The foregoing implications indicate that the surface has been scratched in examining Extension's boundary spanning activity, but it is only a beginning to the understanding of the critical functioning of this organization.

Epilogue

The future of Extension's work with other organizations and

the need for further research has been summarized by Thomson and Brown (1976):

Today's environment dictates that regardless of the philosophy of the land-grant university toward Extension, interorganizational linkages will increase. Since Extension was created in 1914, organizational proliferation has occurred. Increasingly, agencies seek to establish their own delivery or technology transfer systems for educational services. Recently, Extension has sought to accommodate such initiatives nationally in two areas—environment and energy. As agencies seek to avoid program duplication and service proliferation, as well as to control costs, interorganizational adjustments will undoubtedly occur to accommodate a national situation.

The tone or philosophy toward interagency cooperation is set to a great extent by the administrative leadership of Extension. The state Extension director has considerable influence on the Extension staff and its clientele about the value of such interaction. At the same time, the land-grant institution of which Extension is one component can facilitate or hinder interorganizational linkages. The institution, not only Extension itself, shapes the mission of Extension and how it should be carried out. The administrative head of the university also conveys an institutional perspective towards interorganizational cooperation.

Because of the scant evidence documenting costs and benefits of interorganizational relations, and because of its unique organizational structure, Extension's relationships with other organizations will be determined by both internal and external factors. Limited information exists with respect to such questions as: Is Extension's educational program delivered more effectively and efficiently as a result of these linkages? How is the educational program affected by these relationships both in terms of content and methods? What kind of service is best mixed with education? What are the payoffs in working with other organizations and agencies? How do these rewards get distributed among Extension and other organizations as they work together? Or, how is credit distributed and does it make a difference?

In our complex society, decisions made at federal and state levels of organizations appear to have a pervasive impact on the kinds of cooperative relationships that develop between Extension and other organizations at federal, state, and local levels. As new programs develop and new relationships emerge, it's imperative that more research be conducted to deal with issues in interorganizational relations (pp. 67-68).

This study has attempted to provide some evidence about the scope of Extension's involvement with other organizations, the reasons for pursuing interorganizational relations, and perceptions of the effectiveness of boundary spanning activity. It is a beginning of a process to more fully understand, utilize, and improve the boundary spanning function which is an integral and inseparable part of Extension work.

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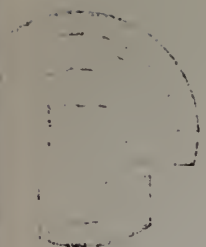
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APPENDIX A
LETTER TO POTENTIAL SUBJECTS



Cooperative Extension Service

COLLEGE OF FOOD AND NATURAL RESOURCES

U.S. Department of Agriculture and Massachusetts Counties Cooperating

Administration
Stockbridge Hall
Amherst, MA 01003

Extension has had long experience in working with other organizations and agencies in Massachusetts but the diversity and extent of this effort has not been documented. Susan Uhlinger has designed a study to help the Massachusetts Cooperative Extension Service determine the types of organizations with which Extension is working, the reasons for working with such organizations, and the effectiveness of the effort.

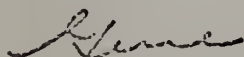
This information will be very useful to us in our contacts with legislators, advisory councils, and potential funding sources. It also may provide new directions for program and staff development.

The study will include selected county directors, 4-H and home economics county department heads, and CRD and agriculture agents. A structured interview process will be used which will take about 1-1/2 hours. All information will be confidential; the final report will make no reference to individuals or counties. Everyone who participates in the study will receive a summary of the findings.

We would like to have your participation in this study. To indicate your willingness to be interviewed, please return the enclosed form as soon as possible, but no later than May 19. An envelope is provided. Ms. Uhlinger will contact you for an appointment.

Your cooperation is greatly appreciated.

Sincerely,



Gene McMurtry
Associate Dean and Associate Director

APPENDIX B
CONSENT FORM

Study on the Cooperative Extension Service
and its work with other organizations

The study on the Cooperative Extension Service and its work with other organizations is concerned with: types of organizations with which Extension is working; reasons for working with such organizations; and the effectiveness of the effort. All information will be confidential; the final report will make no reference to individuals or counties.

Interviews of persons selected to participate in the study will be conducted between May 21 and June 30, approximately, and will be about 1-1/2 hours long.

I agree to participate in the study.

Signature Telephone Date

Dates that are good for me: _____
(date) (location)

(date) (location)

(date) (location)

Please return in the envelope provided by May 19.

5/8/78

APPENDIX C
INTERVIEW SCHEDULE

No. _____ (1-2)

(1) NATURAL RESOURCES/ENVIRONMENTAL QUALITY. The next type of organization we are interested in is natural resource and environmental quality organizations such as water pollution control, air pollution control, solid waste disposal, department of fisheries and wildlife, conservation commissions, department of environmental quality engineering, conservation districts, Mass. Audubon Society, Mass. Conservation Law Foundation.

1. Could you name the organizations in this category that you personally have worked with or had contact with in the past 12 months? By worked with or had contact I mean meetings, phone calls, or programs.	2. What was the primary reason for working with or having contact with _____ (35-36) (37-38) What was the second most important reason? (39-41) What was the third? (41-42)	3. How frequently have you been in contact with (organization) _____ (34) in the past 12 months?	4. You mentioned _____ (33) as the primary reason for being in contact with that organization. How would you rate the effectiveness of that interaction on a scale of 1 to 5 with 1 being very ineffective and 5 being very effective.	5. For what reason do you rate the effectiveness of the work with that organization as you do? This again is (38-39) in terms of your main reason for working with that organization. Are there other reasons? (41-42) (44-45)	6. Has this contact resulted in new programs or new Extension and (organizational) in terms of new, continued, or revised programs. Has this resulted in the past 12 months?
	advisory advocacy affirmative action clientele information sharing mutual goals organization maintenance personal interest personal/professional growth personnel administration program: plan/conduct promotion/p.r. representation resources: \$ resources: other services: plan/conduct technical assistance other	1 2 3 4 5	1 2 3 4 5 very ineffective ineffective effective very effective	changed practices used info clientele: new/needs expertise: own pers feedback: good feedback: poor goals accomplished goals not accomplished lack changed practices lack mutual: organz. lack mutual: pers lack resources: \$S/t mutuality: organization mutuality: pers. new relationship priority: high priority: low public image resources: \$S/staff/time response: good response: poor responsibilities clear responsibilities unclear other no reason	new program continued program revised program good will no result

APPENDIX D
INTERVIEW SCHEDULE (continued)

APPENDIX E
QUESTIONNAIRE

No. _____

(1-2)

Please answer the following questions by placing an "X" in the appropriate blank. All information is confidential.

1. What is your job assignment? (4)

- agriculture (1)
 community resource development (2)
 home economics (3)
 4-H youth work (4)
 county manager-director (5)

2. Sex? (6)

- male (1)
 female (2)

3. Age? (8)

- 21-30 (1)
 31-40 (2)
 41-50 (3)
 51-60 (4)
 61-70 (5)

4. How long have you been in your present job? (10)

- less than three years (1)
 more than three but less than six years (2)
 six or more years (3)

5. What was your major field of study in your undergraduate training? (12)

6. What was your major field of study in your graduate training? (13)

TO BE COMPLETED BY COUNTY MANAGER-DIRECTORS ONLY

7. Number of full-time professional employees on permanent appointment in your county? _____ (14)

8. Number of full-time professional employees on temporary appointment (i.e., EFNEP, CETA, etc.) in your county? _____ (16)

APPENDIX F
PERCENTAGE OF ALL REASONS FOR INTERACTION
BY ORGANIZATION TYPE

APPENDIX F
Percentage of All Reasons for Interaction by Organization Type
N=47

Organization Type	Times Mentioned	All Reasons for Interaction									
		Advisory %	Advocacy %	Affirmative Action %	Clientele %	Information Sharing %	Mutual Goals %	Org. Maint./ Personnel Administ.* %	Pers. Int./ Professional Growth** %	Program Planning/ Delivery %	
Business	412	17.0	0	.2	3.6	18.0	.2	0	.7	25.2	
Education	352	1.4	0	0	18.8	6.3	.3	.6	0	72.2	
Natural Resource	285	31.2	0	0	2.1	33.3	0	0	0	25.6	
Government	259	8.5	3.5	0	2.3	22.0	0	6.6	.8	23.2	
Social Service	244	9.4	0	1.2	8.2	13.1	0	0	1.2	75.8	
Agriculture	201	25.9	3.5	0	8.5	32.3	3.0	1.0	4.5	32.8	
Media	201	0	0	0	19.4	24.9	0	0	0	27.4	
Community Development	184	12.0	0	2.2	6.5	26.6	0	0	0	46.2	
Religious	168	0	0	0	7.1	0	0	0	0	76.8	
Cultural	129	1.6	0	0	8.5	7.8	7.8	0	0	66.7	
Health	125	19.2	0	0	4.0	18.4	.8	0	1.6	53.6	
Leisure	118	11.9	0	0	13.6	2.5	.8	1.0	0	25.4	
Employment	70	0	0	0	5.7	18.6	0	0	0	18.6	
Youth	46	8.7	0	0	0	6.5	2.2	0	0	58.7	
Charitable	22	4.5	0	0	0	0	0	0	0	22.7	
Fraternal	19	4.5	0	0	0	0	0	0	5.3	89.5	
Consumer Protection	17	23.5	0	0	5.9	41.2	0	0	5.9	23.5	
Legal	9	11.1	0	0	11.1	22.2	0	0	0	11.1	
TOTAL	2,861										

*Organizational Maintenance and Personal Administration were combined because they represent a small percentage of total responses.

**Personal Interest and Professional Growth were combined because they represent a small percentage of total responses.

APPENDIX F (Continued)
 Percentage of All Reasons for Interaction by Organization Type
 N=47

Organization Type	Times Mentioned	All Reasons for Interaction						
		Promotion/ Public Relations %	Representation %	Resources: Financial %	Resources: Other %	Service Planning/ Delivery %	Technical Assistance %	
Business	412	15.0	1.0	25.0	8.0	1.9	32.3	
Education	352	13.4	.3	.6	16.5	3.7	9.1	
Natural Resource	285	1.1	4.2	5.6	4.6	15.1	37.2	
Government	259	17.4	0	18.1	6.9	11.2	23.6	
Social Service	244	.4	.4	.4	.8	7.8	4.5	
Agriculture	201	20.4	4.0	16.4	11.9	4.0	13.4	
Media	201	74.6	0	0	0	0	1.0	
Community Development	184	4.3	.5	0	4.3	3.8	21.2	
Religious	168	6.0	3.6	1.8	13.7	.6	5.4	
Cultural	129	17.8	.8	.8	32.6	2.3	1.6	
Health	123	2.4	2.4	1.6	5.6	14.4	16.8	
Leisure	118	13.6	0	.8	11.0	0	44.9	
Employment	70	0	0	51.4	70.0	12.9	4.3	
Youth	46	39.1	0	0	6.5	2.2	17.4	
Charitable	22	0	0	59.1	0	0	22.7	
Fraternal	19	31.6	0	0	42.1	0	0	
Consumer Protection	17	0	0	0	5.9	11.8	17.6	
Legal	9	0	0	0	0	11.1	44.4	
TOTAL	2,861							

APPENDIX G
MEAN EFFECTIVENESS RATINGS FOR TYPES OF
ORGANIZATIONS BY CES AND DIVISIONS

Appendix G

Mean Effectiveness Ratings for Types of
Organizations by CES and Divisions

Organization Type	CES n=47	Agriculture n=15	CRD n=5	Home Econ. n=12	4-H n=8	Directors n=7
Business	4.13	4.01	4.68	3.71	4.12	3.53
Education	4.03	4.39	3.82	3.89	4.08	3.23
Natural Resource	3.84	3.42	3.96	3.67	3.92	4.24
Government	4.06	4.44	3.82	4.25	4.21	3.82
Social Service	3.70	3.08	3.82	3.76	3.74	3.35
Agriculture	4.10	4.15	4.22	4.00	3.84	4.17
Media	4.22	4.16	4.28	4.40	4.53	3.52
Community Development	3.67	4.36	3.75	3.91	4.12	3.20
Religious	3.93	4.13	4.41	3.85	4.13	3.00
Cultural	4.42	4.75	4.71	4.30	4.35	4.50
Health	4.27	4.29	4.00	4.42	3.73	3.33
Leisure	3.74	3.80	2.79	3.17	4.26	4.17
Employment	3.67	4.08	4.38	3.62	3.44	3.35
Youth	4.24	5.00	4.00	3.67	3.90	4.67
Charitable	3.73		4.00	4.00	4.29	2.86
Fraternal	3.84	3.50	4.00	4.00	3.86	
Consumer Protection	4.18		5.00	4.08	3.00	
Legal	3.78		3.50	4.20	3.00	3.00

APPENDIX H
MEAN EFFECTIVENESS RATINGS FOR PRIMARY
REASONS FOR INTERACTION

Appendix H

Mean Effectiveness Ratings for Primary
Reasons for Interaction
N=47

Primary Reason for Interaction	Times Mentioned	Mean Effectiveness Rating
Advisory	189	3.85
Advocacy	3	4.33
Clientele	65	4.30
Information sharing	399	3.92
Mutual goals	6	5.00
Organization maintenance	3	3.33
Personal interest	1	4.00
Personal/professional growth	5	4.20
Personnel administration	5	4.40
Program planning/delivery	1080	4.05
Promotion/public relations	236	4.02
Representation	30	3.77
Resources: financial	195	3.81
Resources: other	158	4.15
Services: planning/delivery	70	3.80
Technical assistance	416	3.99

APPENDIX I
PERCENTAGE OF ALL REASONS FOR EFFECTIVENESS
OF INTERACTIONS

APPENDIX I
 Percentage of All Reasons for Effectiveness/Ineffectiveness of Interactions
 N=47

Organization Type	Times Mentioned	All Reasons for Effectiveness/Ineffectiveness										
		Changed Practices %	Clientele %	Expertise: Organiz./Personal* %	Feedback: Good %	Feedback: Poor %	Goals Accomplished %	Goals not Accomplished %	Lack Changed Practices %	Lack Mutuality: Organiz. %	Lack Mutuality: Personal %	Lack Resources %
Business	412	22.8	6.3	0	7.0	.5	26.7	3.9	.2	10.4	0	1.0
Education	352	28.1	16.5	.3	24.1	5.4	22.4	3.4	12.2	2.6	1.7	1.7
Natural Resource	285	26.7	2.1	0	3.9	.7	24.6	3.5	14.1	10.9	2.8	2.1
Government	259	27.0	5.4	6.2	2.7	3.5	16.6	.4	4.6	.8	.8	.4
Social Service	244	8.2	9.0	.8	18.4	.8	9.0	6.1	18.9	17.2	1.6	.4
Agriculture	201	6.0	9.5	1.5	7.0	.5	18.9	3.0	.5	8.5	1.5	1.5
Media	201	2.5	19.9	2.0	29.9	2.0	8.5	0	3.0	9.0	.5	0
Community Development	184	3.3	9.8	0	19.6	.5	21.2	1.6	3.3	37.0	4.3	0
Religious	168	6.5	48.2	0	23.2	0	8.3	0	23.8	3.6	0	0
Cultural	129	5.4	22.5	0	14.7	0	16.3	0	0	0	0	0
Health	125	20.8	6.4	4.8	11.2	1.6	15.2	3.2	4.0	4.0	2.4	2.4
Leisure	118	5.9	15.3	0	12.7	2.5	5.9	0	16.9	5.1	1.7	0
Employment	70	7.1	4.3	0	5.7	0	17.1	1.4	0	24.3	2.9	8.6
Youth	46	6.5	23.9	0	6.5	0	6.5	0	4.3	0	2.2	2.2
Charitable	22	13.6	0	4.5	4.5	0	9.1	4.5	0	0	0	4.5
Fraternal	19	0	5.3	0	15.8	0	0	0	10.5	15.8	0	0
Consumer Protection	17	5.9	5.9	5.9	11.8	0	23.5	0	5.9	5.9	0	0
Legal	9	33.3	0	0	11.1	11.1	0	0	0	33.3	0	11.1
Total	2,861											

*Expertise: organization and Expertise personal were combined because they represent a small percentage of total responses.

APPENDIX I (Continued)
 Percentage of All Reasons for Effectiveness/Ineffectiveness of Interactions
 N=47

Organization Type	Times Mentioned	All Reasons for Effectiveness/Ineffectiveness											
		Mutuality: Organization %	Mutuality: Personal %	New Relationship %	Priority: High %	Priority: Low %	Public Image %	Resources: \$/staff/Time %	Response: Good %	Response: Poor %	Responsibilities: Clear %	Responsibilities: Unclear %	Other/No Reason %
Business	412	22.3	2.4	3.9	0	.2	8.0	22.1	6.6	2.7	0	0	1.2
Education	352	9.9	2.0	.6	0	0	5.1	10.8	11.1	2.3	.3	.3	.3
Natural Resource	285	27.7	3.9	1.4	0	.7	.7	3.2	.4	.4	0	0	3.9
Government	259	20.1	6.6	1.2	.8	0	6.9	13.1	7.7	5.4	0	0	.4
Social Service	244	25.0	2.5	.8	0	6.1	.4	1.6	15.2	2.0	2.5	.4	.4
Agriculture	201	46.3	11.4	1.0	0	4.5	3.5	11.9	2.0	.5	1.0	0	.5
Media	201	16.9	3.0	0	0	.5	29.4	0	26.4	7.0	0	0	0
Community Development	184	10.9	3.3	1.1	0	0	1.6	3.8	12.5	4.3	0	.5	0
Religious	168	7.1	1.8	7.1	0	3.6	13.1	9.5	3.6	0	0	0	0
Cultural	129	38.8	3.1	0	0	0	13.2	19.4	34.1	1.6	0	0	0
Health	125	31.2	9.6	4.0	0	.8	2.4	2.4	8.8	.8	2.4	1.6	2.4
Leisure	118	39.0	.8	.8	0	8.5	8.5	16.1	15.3	2.5	0	0	0
Employment	70	24.3	2.9	0	1.4	0	0	32.9	0	2.9	0	1.4	1.4
Youth	46	39.1	2.2	2.2	0	0	23.9	0	10.9	4.3	0	0	0
Charitable	22	31.8	0	0	0	0	0	27.3	0	0	0	0	0
Fraternal	19	36.8	10.5	0	0	0	0	10.5	0	5.3	0	0	0
Consumer Protection	17	47.1	11.8	0	5.9	0	0	0	0	5.9	0	0	5.9
Legal	9	11.1	0	0	0	0	0	0	11.1	0	0	0	0
TOTAL	2,861												

*Other and No Reason were combined because they represent a small percentage of total responses.

