

OKLAHOMA'S COUNTY COMMISSIONERS'
ATTITUDES TOWARD THE USE OF AREA
SPECIALIZED AGRICULTURAL
EXTENSION AGENTS

By

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PREFACE

Rapid changes occurring in the clientele of the Cooperative Extension Service and equally rapid changes in technology applicable to these groups have created pressures for the extension service to adjust its traditional pattern of organization.

During the past few years a rapidly developing trend toward multi-county area agent staffing has occurred, with most states now employing some area agents. In February, 1966, the Cooperative Extension Service in Oklahoma joined the trend and began to assign specialized agricultural agents to multi-county areas.

Since county funds are used to partially finance extension work, this study to determine how the county governing boards felt toward this adjustment in organization of extension work appeared to be appropriate.

Sincere appreciation is expressed to all those who have provided assistance in the completion of this study, particularly to the writer's committee, Dr. Richard P. Jungers, Chairman; Dr. Robert R. Price, Dr. Victor O. Hornbostel, and Dr. C. A. Roman (currently on leave of absence). In addition, staff members of the Oklahoma State University Extension Division were extremely helpful.

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CHAPTER I

INTRODUCTION

As establishment of extension work was being considered a half century ago, there were some who held misgivings about this new type of teaching. Indeed, one agriculturist predicted in picturesque terms that if it were undertaken, "..."at no distant day the shores of the agricultural ocean would be strewn with the wrecks of county agents" (31, p. 245).

Despite doubts and dire predictions, extension work was launched and has developed until it was recently described as "...one of the oldest, probably the largest, certainly the most fully developed and perhaps the most effective adult education activity in the United States" (29, p. 200).

The foregoing comment is a testimony to the success of extension work organized and conducted primarily within the boundaries of single counties. However, changes in the needs and interests of clientele, in agricultural technology, and in communication and transportation are prompting serious questioning of this traditional pattern of organization. As a means of adjusting to these changes, most states now have some agents who are highly trained in a specific subject matter field, and have assigned these specialized

workers to multi-county areas. During the last five years, the number of specialized agents has increased very rapidly.

Nature of the Problem

When the Cooperative Extension Service was established in 1914, individual counties rapidly became established as the local units of operation for accomplishing the goals of the organization. As a result, extension workers who have been assigned to single counties are commonly referred to as county agents, and develop local plans of work often designated as county extension programs.

A significant factor leading to this strong identification of extension programming and staffing with a single county has been the appropriation of a share of the funds necessary for conduct of extension work from county tax revenues. Also, offices for extension workers are most often provided in the county court house with other county officials, further strengthening the identification of extension personnel with a certain county.

This close identification of extension with individual counties was a strong asset in establishing and securing acceptance of the organization during its early years. However, during the last 25 years, agriculture has undergone great and rapid changes. Farm operators have become more specialized and their operations involve much higher investments and costs. Farm people are better trained, better informed, and less provincial in their interests. Many of the

larger commercial farm operators are college graduates. They ask questions on more subjects and ask more specific and more penetrating questions. Large numbers of agricultural business firms have appeared on the rural scene creating another source of demand for agricultural information and information of a different type (27, pp. 24-27).

Extension has made numerous adjustments to cope with the changing demands for information. Programs originally were predetermined by farm problems such as devastating insect or disease outbreaks. More recently, increased emphasis has been placed on social, economic, and production factors and long range effects of programs (18, pp. 139-140). Program emphasis has been redefined at the national and state levels to enlarge the scope of information available from extension (34). As extension workers and the scientific knowledge they taught became accepted, emphasis shifted from individual contact with farmers to greater use of mass media and group contacts as methods of increasing their effectiveness (7, pp. 271-272).

These adjustments in program content and methods for conduct of programs, while helping the extension worker keep pace with changing demands, have had little effect upon geographic structure for conduct of the organization's work. The local extension worker, at least until recently, has been left as he was 50 years ago with the county as his geographic area of assignment and all of agriculture as his subject matter responsibility.

Noting that the generalized county agent is often unable to provide information that is specific enough or in great enough depth to meet the needs of today's clientele, most states are attempting to provide the services of specialized agents. This has generally necessitated assignment of the agents to multi-county areas, as individual counties seldom have the funds or the clientele to adequately justify the assignment of a specialized agent.

Specific Statement of the Problem

Following the nationwide trend toward specialization of local extension workers in narrower fields of subject matter, the Cooperative Extension Service in Oklahoma recently provided specialized training for several agricultural agents and assigned them to multi-county areas in the state. Area agricultural agents are now working in over one-half of the counties in Oklahoma, and most of them have been working for approximately one year.

The expense of providing these specialized agents in Oklahoma has been met with state and federal funds. No additional funds were required from the counties involved. Future plans for Oklahoma Extension, however, are to expand the area specialized agent program, which will necessitate securing additional funds from the counties involved if the expansion is to proceed as scheduled.

At the present time, county funds for extension work in Oklahoma total about \$820,000 (37, p. 22). This represents

approximately 17 percent of the total funds expended for extension in the state. A board of three elected county commissioners is responsible in each county for allocation of the county tax revenue. They directly determine the amount of county funds which extension presently receives, and any increase in county funds for extension must meet with their favor.

At the time of this study, little effort had been made to inform county commissioners of the proposed emphasis on area specialized agricultural agents and to secure their support for the change. In sections of the state where area agents were assigned, the county extension personnel were involved in meetings designed to secure staff cooperation in the change and to explain the operating procedures for area agents.

Some contact between local extension personnel and county commissioners does occur, so commissioners in these areas may have acquired some familiarity with multi-county assignments for extension personnel in an indirect way. Due to the traditional close identification of the extension worker with the county which provides the local share of their financial support, county commissioners could be expected to exhibit reluctance in providing funds for agents assigned to a larger geographic area. Resistance of a similar type has been exhibited in many instances toward proposed school reorganization designed to create larger districts.

Purpose of the Study

The purpose of this study is to determine the attitudes of county commissioners in Oklahoma toward the proposed use of specialized agricultural extension agents assigned to multi-county areas and the budgeting of county tax funds to support this type of work.

Specifically, answers will be sought to the following questions:

1. What are county commissioners' attitudes toward the use of area specialized agents in agriculture?
2. What are county commissioners' attitudes toward the allocation of county funds for the support of area specialized agents in agriculture?
3. Do the attitudes of county commissioners in counties where area specialized extension agents have been working differ significantly from those in counties where they are not assigned?

Significance of the Study

Information provided by this study could be highly useful as a basis for initiating a plan of communication to provide county commissioners with information about the proposed use of area specialized extension agents in agriculture. It should also serve as a useful indicator of the extent to which county commissioners in the counties where area agents are now assigned have been informed of the change by indirect means.

CHAPTER II

BACKGROUND AND RELATED INFORMATION

A study of current developments in the organization for extension work becomes more meaningful when viewed in relation to earlier developments. A brief review of background information in various aspects related to the study should prove helpful in understanding implications of the possible changes in organization of extension work.

Extension Organization

Cooperative Extension work was immediately preceded by the simultaneous appearance of the farm demonstrator or agent in several parts of the country. Some of these agents were employed by the federal government, some with foundation funds, some by banks and railroads, some by chambers of commerce, some by counties, some by the land grant colleges, and some by farmer organizations (36, pp. 69-99).

Success with these programs created the desire to establish work of this type on a larger scale. Subsequent passage of the Smith-Lever Act by Congress in 1914 formally established the Cooperative Extension Service.

Although the involvement of local people or local government was not mentioned in the legislation authorizing

establishment of the extension service, the county evolved as the basic unit of the organization. Development of the county program as the operational unit of extension work was not unexpected, however. Soule (32, p. 114) commented in 1914 that with the county as a unit, the work of the extension division should be carried out in harmony with the local government and with the support of county officials who are elected by the people and who would control the appropriation of county funds necessary for the work.

Extension programs did develop within county boundaries and in most states, the county extension offices are housed in the county court house with other county officials. This strong affiliation of extension programs with the county as the local unit of government is a major factor affecting attempts at reorganization for the conduct of extension work.

The county agent's responsibility in agriculture has been described as that of providing technical, economic, marketing, and management assistance to the commercial family farm, to operators of small farms, to the supply, marketing, and processing firms serving the farmer and to other segments of agriculture (5, p. 15). The extension service in most states has employed generalists for county agents, to carry out these broad tasks which encompass all phases of agriculture (27, p. 34).

Two related positions which exist in most states to provide close support for the county extension personnel are the state subject matter specialist and the district super-

visor or district director.

A major task of the subject matter specialist is that of assembling and interpreting scientific findings into usable material for county extension workers. He is an educator with specialized knowledge and skills. He trains agents who in turn train others, and is the tie between the subject matter department of the college and the field (22, p. 85). The specialist has no administrative authority, but relies on the authority of technical competence in carrying out his functions.

Counties within a given state have traditionally been organized into districts for supervisory purposes. The supervisor functions primarily in assisting the county staff with administrative matters. They transmit to county personnel over-all state policies and indicate areas selected for program emphasis. In addition, they may have responsibilities for placement and evaluation of personnel (28, p. 38). As the subject matter specialist is the link between the college and the field staff for technical information, so the district director or district supervisor is the administrative link.

Basically then, the traditional organization for extension has consisted of an agricultural generalist as county agent who has relied upon specialists for subject matter information and is administratively responsible to a district supervisor (28, p. 38).

Though widespread efforts in establishing multi-county

areas for conduct of extension work have occurred only recently, the idea was conceived much earlier. In 1933, a committee which had studied extension work in Iowa reported that "Certain advantages might be gained by organizing field agent work by larger districts. Combinations of two, four, and nine counties have been most often suggested" (1, p. 106). They further explained that such districts might employ experienced men as supervisors with specialists in various fields under them. A major obstacle to the move was recognized when they stated:

It seems certain, however, that it will be somewhat difficult to shift to larger districts as long as counties of the present size remain the local units of government and a part of the extension funds are appropriated by counties.

These factors which the committee identified as restricting the development of extension work on a multi-county rather than a single county basis in 1933 still are present today. Counties remain the local units of government, and county tax revenue still is the source of a sizeable amount of funds for extension work. This explains, at least in part, the deliberation with which states have implemented the use of multi-county area agents.

More recent comments on the need for agent specialization and geographic reorganization of extension work on the local level carry a sense of urgency. Bailey (2, p. 82) in discussing extension's future made the following statement:

Ironically, the agency which has preached the gospel that farmers must constantly change in order to survive is now faced with the pressing necessity of practicing what it preaches. The most significant

change in store for Extension...is an organizational change. The County Extension unit may be on the way out, at least in many areas of the country.

He identified the acceleration of change in farming and specialization of individual farmers as factors making it "...virtually impossible for a county agent to be all things to all people".

Johnson, (16, p. 33) also indicated that the county agent was not sufficiently specialized and urged an acceleration of the move toward using specially trained personnel assigned to larger geographic areas, "...and they had better be good," he added. In a description of tomorrow's county agent, Eldridge (10, p. 24) stated "...no county agent can hope to be well qualified in all fields," and suggested a higher degree of specialization in knowledge and teaching methods as a logical trend.

A growing feeling that the county is no longer the most efficient unit for extension program development prompted Carew (4, p. 32) to predict that "...despite problems of local financing and administration, we shall probably witness a further trend towards the employing of specialized district and regional agents."

Federal Extension Service Administrator, Lloyd H. Davis (6), in addressing a group of extension workers recently said the traditional county agent should become a specialist in some field of interest to his clientele, and added that as agents specialized they probably would work in several counties.

With some general agreement on the need for more specialization of local extension staff members, adjustments in that direction are underway, and it seems inevitable that the trend will continue at an accelerated rate.

From 1960 to 1965, for instance, there was a net increase nationwide of 580 area agents (5, p. 58). This is significant in that the number of area workers more than doubled during that time (11, p. 36).

This recent increase in the use of area agents prompted formation in 1964 of a Federal Extension Service Task Force to study this new approach in 13 selected states. For the purpose of the study, area agents were identified as those having: (1) Primary responsibility for direct contact with clientele in a multi-county area; (2) Little responsibility for training other agents; and (3) No direct responsibility for support of individual county programs (19, p. 1).

In contrast to previous approaches which provided personnel to better train the county agent in a broad subject matter area for work in a small geographic area, the area agent approach emphasizes specialization in a narrower area of subject matter and assignment to a larger geographic work area.

Recognizing the desirability of providing specialized assistance in agriculture, the Cooperative Extension Service in Oklahoma has begun to establish area agent positions. As of June 1, 1967 ten specialized agricultural agents are

serving in six multi-county areas, comprising a total of 39 counties, with additional area agents currently in training. Though Oklahoma was not one of the 13 states included in the Federal Extension Service study referred to above, the area agents have responsibilities congruent with those identified in the study.

Area agents in Oklahoma are administratively responsible to a district director, with subject-matter assistance from State subject-matter specialists. The area agent position is an added position, and has been superimposed on the pre-existing county positions in the area.

Wide variation exists between states in the organization of area agent work. The pattern which Oklahoma has followed was categorized by the Federal Extension Service as one involving less deviation from the traditional county pattern of organization when compared with other patterns identified in the study (19).

Area agents represent only a small portion of the total extension field staff in Oklahoma, and they have been operating for slightly over one year. However, these moves indicate a commitment on the part of the Cooperative Extension Service in Oklahoma to the idea of using specialized agents assigned to a multi-county area.

County Commissioners

Most states have delegated the responsibility for local government to counties, though a few states do recognize

other geographic areas as the unit for local government. In Oklahoma, counties are the designated units of local government and Oklahoma statutory law provides that: "The powers of a county as a body politic and corporate shall be exercised by its Board of County Commissioners" (25, p. 1271). Each county in Oklahoma is divided into three districts, with one county commissioner elected from each district for a two year term. Commissioners begin their term on the first Monday in January following their election, and a chairman of the Board of County Commissioners is elected at their first meeting (25, pp. 1286-1311).

A study of county governing boards by the Bureau of the Census in 1965 (38, pp. 2-3), would indicate that Oklahoma has much in common with other states in the provisions it has made for county government, both in the size and official title of the governing body.

Professor Hanson (14, pp. 388-400) of the Oklahoma State University Political Science Department reported that Oklahoma county commissioners not only can initiate or cancel county projects, and approve or disapprove county expenditures, but they are often influential in state policies where they have a direct concern. His recent survey of county commissioners revealed that 62 percent were farmers, 11 percent had no private occupation, 9.5 percent were engaged in construction and contracting, 6.9 percent were merchants, and 6.0 percent listed real estate as their occupation.

County commissioners responding to his study indicated their educational level as: grade school, 29.5 percent; high school, 33.3 percent; some college 34.4 percent; and college degree, 3.8 percent.

Care of county roads and county finances were the two areas named by commissioners as their major concerns. However, it was noted that in the two large urban counties where Tulsa and Oklahoma City are located, the commissioners become heavily involved in problems of city-county cooperation.

Hanson, in his study, reported that county commissioners were opposed to moves that would centralize functions now carried out by counties. White (41, pp. 5-6), in a study of county commissioners' perception of the extension service in North Carolina found them to be highly pleased with the value of extension work in their counties. Eighty-five percent felt county extension agents were very well qualified and have kept up to date well, while 75 percent indicated they viewed their county extension staff as being about the right size. These results in North Carolina also indicate a high degree of satisfaction with current organization and little need to change extension structure as perceived by the county commissioners.

In Oklahoma specific responsibilities of the Board of County Commissioners for extension work are designated in the Oklahoma Higher Education Code (24, p. 28), as follows:

(c) The Board of County Commissioners of the respec-

tive counties of the State may, and are hereby authorized and empowered to contract and agree with the Department of Agriculture of the United States of America and the Oklahoma State University of Agriculture and Applied Science, or with the authorized agent or agents of said Department of Agriculture and said University, to cooperate with the Department of Agriculture and the University in conducting farm demonstration work and home demonstration work including 4-H club work in their respective counties under such rules and regulations as may be prescribed jointly by the Department of Agriculture and Oklahoma State University of Agriculture and Applied Science. Such agreement shall be in writing, signed by the members of the board of county commissioners and the authorized agent of the United States Department of Agriculture and Oklahoma State University of Agriculture and Applied Science, and may be entered into at any regular or adjourned session of said board, after the 30th day of June of each year. Provided, that the board of county commissioners shall provide an adequate amount in their annual estimate for the ensuing year to carry out the provisions of such contract, same to be included in the salary fund and expense fund to be paid on order of the board of county commissioners to such workers as may be agreed upon between said board of county commissioners and the authorized agent of the Department of Agriculture and the University to carry on said farm demonstration work and home demonstration work in said county.

It can be seen from these provisions that the amount of county funds allocated for extension work is left for the Board of County Commissioners to determine, with the only criterion being a subjective determination of adequacy. In practice, this lack of specific financing procedures has resulted in a wide variation in the amount of funds provided for extension by the various counties. Financial records of the Oklahoma State University Extension Division indicate that for fiscal year 1966-67, county funds, measured as a percentage of the total cost of county programs, varied from a low of 5 percent to a high of 53 percent. Oklahoma is not unique in its financial arrangements, however. A 1963 re-

port indicates that only 16 states have developed a recommended ratio of county funds to state funds, while the other 34 states operate without such a guideline (11, p. 34).

Attitudes and Their Measurement

One does not find unanimity in definitions of attitude. However some consensus may be implied from the definitions available. McNemar (23, p. 289) in defining attitudes states:

The common element of most definitions of social attitudes is that such an attitude is a readiness or tendency to act or react in a certain manner. No one has ever seen an attitude. An attitude, however real it is to its possessor, is an abstraction the existence of which is inferred either from nonverbal overt behavior or verbal and symbolic behavior.

Katz (17, p. 168) stated similarly that "Attitude is the predisposition of the individual to evaluate some symbol or object of his world in a favorable or unfavorable manner."

There is some tendency among several authors to treat attitude, opinion and sentiment as terms referring to basically the same phenomenon.

Though attitudes are not visible, they do exist and can be measured. The two most common methods of securing data concerning attitudes are the interview and the questionnaire. Good and Scates (13, pp. 606-607) state:

The questionnaire is especially useful in descriptive-survey studies in securing information from widely scattered sources and when it is not practical or

feasible to see the respondents personally.

In addition, it has been pointed out that questionnaires are impersonal in nature, they use standardized wording and standardized instructions, and do not pressure the subject for an immediate response to questions. The questionnaire is also subject to certain disadvantages. Questions cannot be further explained, it is impossible to probe responses, and subjects must have some knowledge of the subject being studied (15, pp. 156-157).

Questionnaires are often sent by mail to subjects. A common difficulty associated with the use of direct mail questionnaires, however, is the low percentage of returns (35, pp. 248-249). Wallace (39, p. 51) pointed out that questionnaires tend to be returned by certain types of people, and thus a survey with a low percentage return may be biased by an unknown quantity.

Numerous efforts have been made, however, to discover methods of making the mail survey more effective. Eckland (8, pp. 165-167), for example, reported on his experience with response to a survey of former college students where the initial contact was by mail and consisted of a printed questionnaire, cover letter, and stamped return envelope. A second mailing was made 20 days later with the same enclosures except for a new cover letter. A reminder card was then mailed 5 days later. Fifteen days after the card was sent, attempts were made to contact 383 nonrespondents by telephone and two to three weeks later by certified letter.

Mail-back returns were eventually received from 82 percent of the nonrespondents. Thus, by the use of prodding devices, the total response rate was increased from 67 to 94 percent. It was clearly established that, had the returns received later not been secured, college dropouts would have been under-represented. By use of several sources of information it was possible to check the veracity of responses. Replies from respondents in the later stages appeared to be no more discrepant than those received earlier.

A recent study by Linsky (21, pp. 183-187) was designed to investigate the effects of cover letter construction in securing response to a mail survey of members of a state nurses' association conducted in 1964. Personalization of the cover letter through use of a handwritten personal salutation and signature, and an explanation of the place and importance of the respondent in the study both were highly significant in eliciting responses. Appeals based on social utility and help to the researchers, though often recommended, did not prove effective in this case.

Though the descriptive-survey method of research itself has been criticized by some writers, others feel it is quite useful under appropriate circumstances. Lazarsfeld (20, p. 47) in writing about attitude surveys noted that despite their obvious limitations, survey methods are one of the foundations upon which social science is being built. He feels surveys can perform the task of describing interre-

relationships which are present and what human reactions actually occur most frequently. Good (12, p. 245) indicates "...descriptive studies provide essential knowledge about the nature of objects, events, or persons." They are useful in providing proper perspective concerning existing situations or conditions.

Stouffer (33, pp. 294-295), in discussing comparison of attitudes stressed the desirability of designing the study to include a control group and treatment group, but indicated "Comparison of attitudes of two similar groups subjected to different experiences can be used if a better design cannot be had."

In summary, a review of literature concerning attitudes indicates that: (1) Attitudes have been defined and proven to exist; (2) Information concerning attitudes may be collected and attitudes can be measured; and (3) The questionnaire is a method often employed in collecting data about attitudes.

CHAPTER III

GENERAL PROCEDURES OF THE STUDY

The purpose of this study, as stated in Chapter I, was to determine county commissioners' attitudes toward the proposal of using area specialized agricultural extension agents. To accomplish the purpose set forth, an instrument was developed and sent to commissioners in 60 selected counties in Oklahoma. The following sections outline the procedures followed in conducting the study.

Population and Sample

At the time this study was conducted, 39 of Oklahoma's 77 counties were being served by area specialized agricultural agents. Included in this number was one area composed of eight counties which was established and an area agent assigned March 1, 1967. Due to the recency of this action, these eight counties were eliminated from the study. Because of its urban nature, Oklahoma County was also excluded from the study. The remaining 30 counties served by area agents comprised one target group from which county commissioners were asked to participate in the study.

Area agents were not assigned at the time of the study in 38 counties. Tulsa County was in this group and was ex-

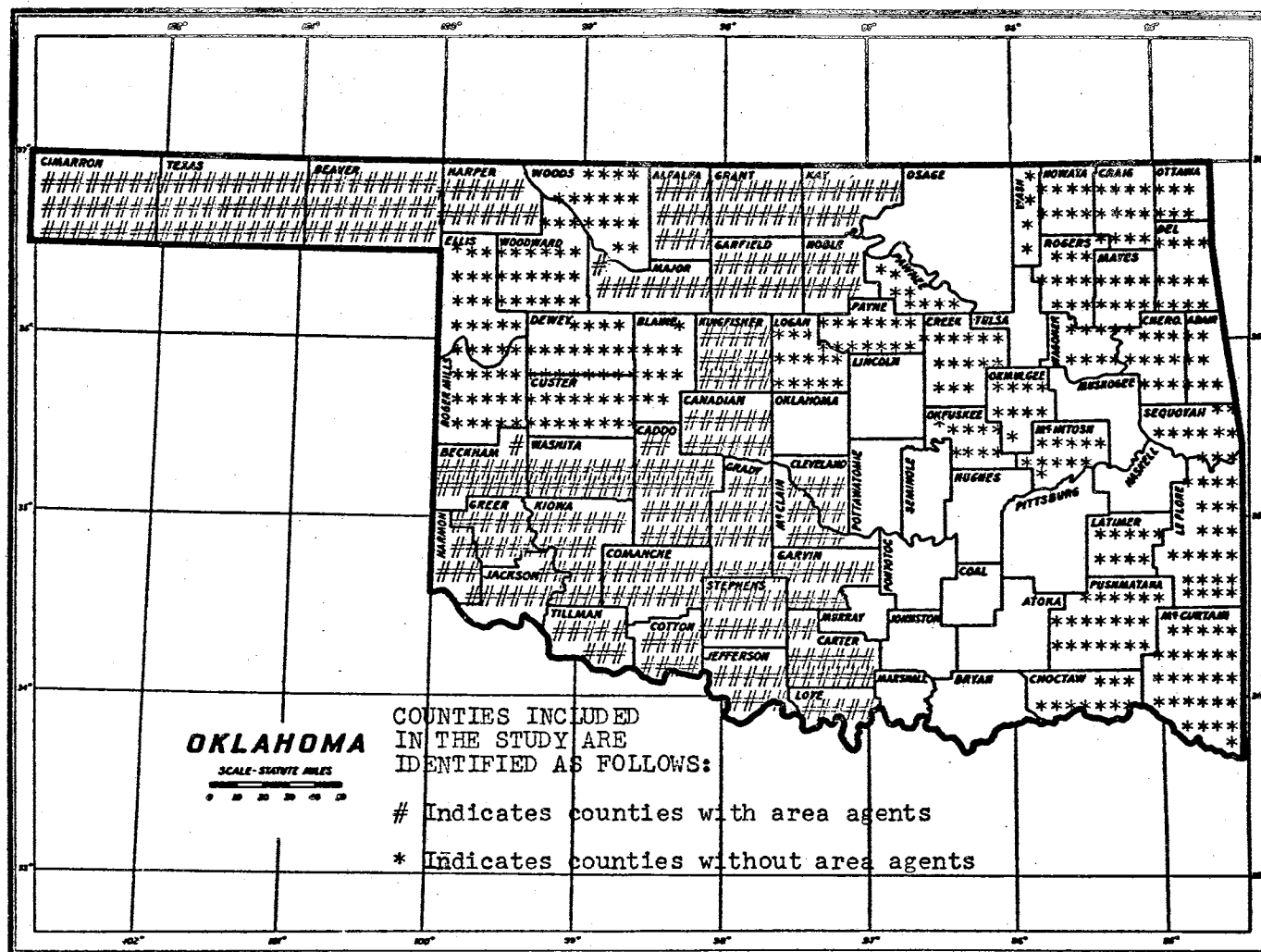


Figure 1. Counties Included in the Study

cluded from the study, as was Oklahoma County, because of its urban nature. Since it was desired for statistical purposes to have an equal number of commissioners in each group of counties studied (40, pp. 125-126), the remaining 36 counties without area agents were numbered and a target group of 30 counties selected by use of a table of random numbers (40, pp. 109-110). The counties comprising both study groups are identified in Figure 1, page 22.

The two selected groups of 30 counties each were the source of a total of 180 county commissioners asked to participate in the study. However, it was found during the conduct of the study that one commissioner in each of the groups had deceased, reducing the number of possible participants to 178.

Development of the Instrument

Three steps were involved in developing the study instrument. A major task was selection of a group of suitable attitude statements to be used. A second involved choosing information to be requested on a personal data sheet, and the third consisted of writing a cover letter to accompany the information forms.

In searching for sources of attitude statements which might be included in the instrument, two studies proved to be quite fruitful. One was a study of county commissioners in North Carolina conducted by White (41), and the other a study by Blalock (3), who investigated state legislators'

perceptions of the North Carolina Extension Service.

After compiling a list of attitude statements which might be used, members of the administrative staff of the Extension Division at Oklahoma State University were contacted and additional items secured to be considered as possible attitude statements. From this list of possible attitude statements a preliminary group of items was prepared and given to the District Extension Directors with the request that they react to the items and indicate those they felt should be deleted or to suggest statements they felt should be added.

When lists were received from the District Directors, an instrument was developed consisting of 15 attitude statements with blanks provided for county commissioners to check whether they agreed or disagreed with the statement. Young (42, pp. 193-198) and Edwards (9, pp. 13-14) each suggested criteria which were very helpful in constructing the attitude statements.

Personal information chosen to be requested from the county commissioners and used as classification variables consisted of their age, occupation, tenure as a county commissioner, education, and involvement in county extension programs. The studies by White (41) and Blalock (3) were again helpful in this process as was the study by Hanson (14) of Oklahoma county commissioners.

Several persons contacted during the process of constructing the study instrument expressed a concern that

county commissioners would be reluctant to respond to a study of the type outlined here. County commissioners in Oklahoma have a strong state association in which most commissioners are active. It was felt that involvement of this group in the study would be wise and would stimulate county commissioners to participate when asked.

Arrangements were made to meet with the president of the association, Mr. James J. Tooley. After the proposed study and the instrument which had been developed were discussed, Mr. Tooley suggested that the writer meet with officers of the association during the annual meeting of the organization April 4 and 5, 1967. This suggestion was followed and a meeting was held April 4 with the association officers. Suggestions concerning items in the instrument were received and an endorsement from the president of the association was secured to be used in the cover letter which accompanied the questionnaire.

Following this meeting, the instrument was revised to eliminate difficulties encountered by the group in responding to the items. The revised instrument consisted of the five personal data items, thirteen attitude statements requiring an agree-disagree response, and one statement asking them to choose one of several alternative answers provided.

A cover letter was constructed which included a paragraph noting the importance of county commissioners in providing local support for extension, the statement from

President Tooley of the commissioners association endorsing the study, and an appeal for them to participate in the study by completing and returning the form.

This revised instrument was pre-tested by mailing it to 12 commissioners and by using it in personal interviews with four commissioners. All pre-testing was done in counties previously excluded from the study. Eight of the twelve mailed instruments were completed and returned within one week. No additional effort was made to secure the four instruments not returned. Following a study of results from the pre-test, some minor changes were made in the instrument and it was duplicated in the form used for the study. Copies of the letter and form used are included in Appendix A.

Collection of Data

Instruments were mailed to the 178 commissioners in counties selected for the study on April 21, 1967. A personal salutation and handwritten signature and postscript were used in the cover letter. A stamped, addressed envelope was also included for return of the completed form. The forms were identified with a code number so nonrespondents could be contacted, and returns placed in the proper group for analysis.

Within a week, the number of returns from the original mailing declined sharply. A postcard was prepared stressing the importance of their participation and sent to nonrespondents one week after the original mailing was made. Re-

turns increased following this contact, but again dwindled rapidly and a second reminder postcard was mailed one week later. Only a small increase in returns occurred after the second reminder card was sent.

TABLE I
RETURNS FROM COUNTY COMMISSIONERS
ASKED TO PARTICIPATE

Contact Made With Subjects	Returns Received	Cumulative Total of Returns	Nonrespondents Remaining
Original Mailing April 21	69	69	109
First Reminder April 28	36	105	73
Second Reminder May 5	9	114	64
Second Mailing May 12	27	141	37
Telephone Call May 18-21	2	143	35

On May 12, another instrument was mailed to nonrespondents with a revised cover letter and a return envelope. The wave of returns following this mailing included responses from 27 of the 64 recipients; a return of slightly over 40 percent.

About a week following the mailing, only a small number

of returns were being received and an attempt was made to contact the remaining nonrespondents by telephone. Nineteen of the commissioners were reached by telephone and two returns were received following the contact. This brought the total number of responses to 143, or 80.3 percent of the county commissioners asked to participate. It is apparent that a telephone call following a vigorous follow-up by mail was of little value in securing additional returns from the group studied here. Table I presents a breakdown of returns received as well as the number of nonrespondents at various stages of the data collection process.

Analytical Procedures

For the purpose of answering the first and second questions expressed in the statement of purpose, this study approaches being a census of a population rather than dealing with a population sample. The procedure used in presenting the results for these two questions involved tabulating responses to the attitude statements and comparing percentages of "agree" and "disagree" responses in contingency tables as suggested by Wert and others (40, p. 3).

Answering the third question expressed in the statement of purpose of the study involved a comparison of responses from the two groups. For this purpose, frequency counts of the responses were placed in 2 X 2 contingency tables and the chi-square test for two independent samples was used to determine whether the two groups differed in their response

to the attitude statements using the procedure described by Siegel (30, pp. 106-110).

Responses to the five items requesting personal information from the subjects also were tabulated and presented to provide a short descriptive summary of county commissioners in Oklahoma.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Information received from county commissioners participating in the study is presented in this chapter. The results are presented in three sections.

In the first section, personal characteristics of the county commissioners participating in the study are reported and discussed. In referring to the two groups of commissioners, those from counties where area agents are presently functioning are designated as the "area" group and those from counties not served by area agents are designated as the "non-area" group.

The second section contains county commissioner's responses to the 14 items in the attitude instrument. A numerical report of responses to the statements is made and percentages are calculated and reported.

In section three, responses from the area and non-area groups of commissioners are compared, and a chi-square test for significant differences is calculated on the responses to each item in the attitude instrument.

Characteristics of the County Commissioners

County commissioners participating in the study were

asked to give information about their age, major occupation, tenure as a county commissioner, education, and their involvement in extension programs.

The number of commissioners in various age categories is shown in Table II. Nearly one-third of the commissioners participating in the study were 50 to 59 years of age. Slightly over 30 percent were in the 40 to 49 category, and almost one-fourth listed their age as 60 years or over. Only 8.4 percent indicated they were under 40 years of age.

TABLE II
AGE OF AREA AND NON-AREA COUNTY COMMISSIONERS

Age	Area		Non-Area		Total	
	Number	Percent	Number	Percent	Number	Percent
Under 40	6	8.5	6	8.3	12	8.4
40-49	19	26.8	25	34.7	44	30.8
50-59	26	36.6	21	29.2	47	32.8
60 or over	17	23.9	18	25.0	35	24.5
No Response	3	4.2	2	2.8	5	3.5
Total Returns	71	100.0	72	100.0	143	100.0

The area and non-area groups of commissioners were very similar in age, with the greatest differences reported in the 40-49 and 50-59 age categories. A larger number of area commissioners indicated they were 50-59 years of age.

Major occupations of the 143 commissioners who participated are listed in Table III. Four commissioners from

the area group and five from the non-area group responded to more than one choice in this item, thus, the total number of responses reported in the table is larger than the number of participants, and the percentages total more than 100.

TABLE III
MAJOR OCCUPATIONS OF COUNTY COMMISSIONERS

Occupation	Area N=71		Non-Area N=72		Total N=143	
	Number	Percent	Number	Percent	Number	Percent
Farming or Ranching	51	71.8	49	68.1	100	69.9
Construction or Contracting	3	4.2	3	4.2	6	4.2
Merchant or Businessman	5	7.0	3	4.2	8	5.6
Real Estate	0	0.0	1	1.4	1	0.7
Other	2	2.8	5	6.9	7	4.9
No Private Occupation	10	14.1	12	16.7	22	15.4
No Response	4	5.6	4	5.6	8	5.6

Almost 70 percent of the commissioners reported farming or ranching as their major occupation. The next largest category was those who indicated they had no private occupation, with 15.4 percent of the commissioners indicating this response. Of the remaining commissioners, 5.6 percent indicated they were merchants or businessmen, 4.9 percent indicated a major occupation other than those listed, and 4.2

percent listed construction or contracting as their major occupation. Only one commissioner listed real estate as a major occupation.

The data in Table III show that the two groups of commissioners are quite similar in their major occupations with only slight differences appearing in the various categories.

TABLE IV
TENURE OF THE 143 PARTICIPATING COUNTY COMMISSIONERS

Years Served	Area		Non-Area		Total	
	Number	Percent	Number	Percent	Number	Percent
4 Years or Less	18	25.3	18	25.0	36	25.2
5-9	30	42.3	31	43.1	61	42.6
10-14	7	9.9	9	12.5	16	11.2
15 or More	14	19.7	14	19.4	28	19.6
No Response	2	2.8	0	0.0	2	1.4
Total Returns	71	100.0	72	100.0	143	100.0

The data in Table IV indicate that 25.2 percent of the commissioners had been in office only 4 years or less, while over 40 percent indicated they had served as commissioner for 5-9 years. Almost 20 percent had been in office 15 years or more and slightly over 11 percent had served from 10-14 years.

The responses in Table IV show that commissioners in the area group and those in the non-area group were nearly

identical in their tenure of office.

Table V contains information pertaining to the education of county commissioners. Twenty-one percent of the commissioners indicated they had received only a grade school education, and 44 percent indicated completion of high school was the highest level of education they had received. Over one-fourth of the commissioners had completed some college work, while an additional 5.6 percent were college graduates.

TABLE V
HIGHEST LEVEL OF EDUCATION COMPLETED
BY COUNTY COMMISSIONERS

Educational Level Completed	Area		Non-Area		Total	
	Number	Percent	Number	Percent	Number	Percent
Grade School	12	16.9	18	25.0	30	21.0
High School	33	46.5	30	41.7	63	44.0
Some College	18	25.4	19	26.4	37	25.9
College Graduate	5	7.0	3	4.1	8	5.6
No Response	3	4.2	2	2.8	5	3.5
Total Returns	71	100.0	72	100.0	143	100.0

The two groups were similar in the level of education they had completed, with a slightly larger number of the non-area commissioners reporting grade school as the highest level of education they had received.

Responses to the question of whether county commis-

sioners or members of their families had participated in extension programs are reported in Table VI. Since this item provided for multiple responses, the total number of responses in the table exceed the number of participants in the study, and the percentage totals exceed 100.

TABLE VI
PARTICIPATION BY COUNTY COMMISSIONERS
IN EXTENSION PROGRAMS

Program Participated in	Area N=71		Non-Area N=72		Total N=143	
	Number	Percent	Number	Percent	Number	Percent
4-H	46	64.8	45	62.5	91	63.6
Home Demonstration Clubs	26	36.6	27	37.5	53	37.1
Agricultural Information	30	42.3	26	36.1	56	39.2
None	11	15.5	14	19.4	25	17.5
No Response	2	2.8	0	0.0	2	1.4

Only 17.5 percent of the commissioners indicated they or their families had participated in none of the extension programs in their county. Participation was highest in the 4-H program, where 63.6 percent indicated involvement. Slightly over 39 percent of the commissioners indicated they had received agricultural information, and 37.1 percent indicated a member of their family had been involved in home demonstration clubs.

A larger number of county commissioners in the area group indicated they had participated in agricultural information programs than did those in the non-area group, but the difference was quite small. The number of commissioners in the non-area group indicating they had participated in none of the extension programs was slightly larger. In other categories, responses from the two groups of commissioners were nearly identical.

A comparison of the area and non-area groups of commissioners on all five personal characteristics reported here indicates that few differences exist between the groups, and that the differences, where they do exist, are quite small.

Responses to the Attitude Statements

Participants in the study were asked to agree or disagree in response to 13 attitude statements in the instrument, and were asked to choose between several alternative responses on item 14 of the instrument. The responses which commissioners gave to each of the 14 items are reported in this section by showing the number and percentage of commissioners who chose each response.

Examination of the data in Table VII reveals that county commissioners are about evenly divided in their response to attitude statement 1. Nearly one-half indicated they felt more specialized help for agriculture was needed in their county, while the other half indicated they did not

desire such help.

TABLE VII

RESPONSES TO ATTITUDE STATEMENT 1: "I FEEL
THAT AGRICULTURE IN MY COUNTY SHOULD HAVE
MORE SPECIALIZED EXTENSION HELP."

Response	Number	Percent
Agree	69	48.3
Disagree	70	48.9
No Response	4	2.8
Total	143	100.0

The data in Table VIII show that a sizeable majority of the commissioners disagreed with attitude statement 2. Slightly over 57 percent indicated they did not believe extension should add more county agents similar to those now provided, while only 35.7 percent agreed with the statement.

TABLE VIII

RESPONSES TO ATTITUDE STATEMENT 2: "I BELIEVE ANY
CHANGE IN EXTENSION'S EFFORTS IN AGRICULTURE
SHOULD BE TO PROVIDE MORE COUNTY AGENTS
SIMILAR TO THOSE NOW PROVIDED."

Response	Number	Percent
Agree	51	35.7
Disagree	82	57.3
No Response	10	7.0
Total	143	100.0

TABLE IX

RESPONSES TO ATTITUDE STATEMENT 3: "I FEEL
THAT PRESENT COUNTY AGENTS CAN PROVIDE
ADEQUATE INFORMATION WITHOUT THE USE
OF MORE SPECIALIZED AGENTS."

Response	Number	Percent
Agree	85	59.4
Disagree	53	37.1
No Response	5	3.5
Total	143	100.0

TABLE X

RESPONSES TO ATTITUDE STATEMENT 4: "I FEEL
IF SPECIALIZED AGRICULTURAL AGENTS ARE
USED THEY SHOULD BE IN ADDITION TO
PRESENT COUNTY AGENTS."

Response	Number	Percent
Agree	95	66.4
Disagree	41	28.7
No Response	7	4.9
Total	143	100.0

The responses to attitude statement 3 are listed in Table IX. Nearly 60 percent of the commissioners agreed with this statement, indicating they felt present county agents could provide adequate information. Slightly over 37 percent of the commissioners disagreed with the statement, thus indicating they felt present county agents could not

provide adequate information without the use of more specialized agents.

County commissioners' responses to attitude statement 4 are shown in Table X. Nearly two-thirds of the commissioners indicated they felt that specialized agents, if used, should be provided in addition to present county agents. Almost 29 percent of the commissioners indicated they disagreed with the statement.

TABLE XI
RESPONSES TO ATTITUDE STATEMENT 5: "I BELIEVE
FUTURE EXTENSION PLANS SHOULD INCLUDE THE
USE OF SPECIALIZED AGRICULTURAL AGENTS."

Response	Number	Percent
Agree	76	53.1
Disagree	57	39.9
No Response	10	7.0
Total	143	100.0

Table XI contains an analysis of responses to attitude statement 5. Slightly over 53 percent of the county commissioners agreed and nearly 40 percent disagreed with the statement. These responses indicate a slight majority of the commissioners feel that specialized agents should be included in future extension plans. Seven percent of the commissioners failed to respond to the statement as shown in Table XI.

One alternative method of providing specialized agri-

cultural agents is to train present county agents in a limited subject matter field and allow them to work across county lines. This alternative was presented to the county commissioners in attitude statement 6, and the responses are shown in Table XII. Most of the commissioners were not in favor of this alternative, as 58.7 percent disagreed with the statement while only 37.1 percent indicated they agreed with it.

TABLE XII

RESPONSES TO ATTITUDE STATEMENT 6: "I BELIEVE PRESENT COUNTY AGENTS SHOULD BE TRAINED AS SPECIALIZED AGRICULTURAL AGENTS AND ALLOWED TO SHARE WORK ACROSS COUNTY LINES."

Response	Number	Percent
Agree	53	37.1
Disagree	84	58.7
No Response	6	4.2
Total	143	100.0

The multi-county areas to which specialized agents are assigned in Oklahoma consist of from four to seven counties, with most of them assigned to seven-county areas. In attitude statement 7, commissioners were asked if they thought specialized agricultural agents could work satisfactorily over a 6-8 county area. Fifty-one percent of the commissioners indicated they thought a 6-8 county area would be unsatisfactory and 42.7 agreed that a specialized agent

could work satisfactorily over an area of this size. In a few instances, commissioners wrote in that they felt a 3-4 county area would be satisfactory, but felt the proposal of 6-8 counties in an area was too large.

Commissioners indicated strong agreement with attitude statement 8, as evidenced in Table XIV. Seventy-nine percent agreed that if several specialized agents were assigned to an area, all of them should not be allowed to live in one county of the area, while only 17.5 percent disagreed with the statement.

TABLE XIII

RESPONSES TO ATTITUDE STATEMENT 7: "I BELIEVE
SPECIALIZED AGRICULTURAL AGENTS COULD WORK
SATISFACTORILY OVER A 6-8 COUNTY AREA."

Response	Number	Percent
Agree	61	42.7
Disagree	73	51.0
No Response	9	6.3
Total	143	100.0

County commissioner responses to attitude statement 9 are reported in Table XV. The data in Table XV indicate that 21 percent of the commissioners believe all agricultural extension work should be carried out by area specialized agents, while 71.3 percent indicated they did not believe all extension work in agriculture should be conducted in this manner. The number of commissioners failing to re-

spond to this statement was quite high, with 7.7 percent giving no response.

TABLE XIV

RESPONSES TO ATTITUDE STATEMENT 8: "IF SEVERAL
SPECIALIZED AGENTS WERE ASSIGNED TO AN AREA
THEY SHOULD BE PREVENTED FROM ALL LIVING
IN ONE COUNTY OF THE AREA."

Response	Number	Percent
Agree	113	79.0
Disagree	25	17.5
No Response	5	3.5
Total	143	100.0

TABLE XV

RESPONSES TO ATTITUDE STATEMENT 9: "I BELIEVE
ALL AGRICULTURAL EXTENSION WORK SHOULD BE
CARRIED OUT BY SPECIALIZED AGENTS
ASSIGNED TO A 6-8 COUNTY AREA."

Response	Number	Percent
Agree	30	21.0
Disagree	102	71.3
No Response	11	7.7
Total	143	100.0

A decision that must be made in establishing multi-county areas for the conduct of extension work is whether an extension office should be maintained in each county. In

attitude statement 10, commissioners were asked if they felt an extension office should be maintained in each county even though all extension workers were assigned to a multi-county area.

The data in Table XVI show county commissioners agreed more highly with the above statement than with any other item in the instrument. Over 85 percent agreed that an extension office should be maintained in each county under the conditions described, while only 9.8 percent indicated they did not feel it necessary to keep an office in each county.

In item 11, commissioners were asked to agree or disagree with a statement indicating whether they were willing to allocate county funds to secure the services of a specialized agent in their county. The responses to this statement are shown in Table XVII. Just over 60 percent of the commissioners disagreed with it.

TABLE XVI

RESPONSES TO ATTITUDE STATEMENT 10: "I FEEL IF ALL
AGRICULTURAL EXTENSION AGENTS WERE ASSIGNED TO A
6-8 COUNTY AREA AN EXTENSION OFFICE SHOULD
STILL BE KEPT IN EACH COUNTY."

Response	Number	Percent
Agree	122	85.3
Disagree	14	9.8
No Response	7	4.9
Total	143	100.0

TABLE XVII

RESPONSES TO ATTITUDE STATEMENT 11: "I WOULD BE WILLING TO ALLOCATE COUNTY FUNDS TO SECURE THE SERVICES OF A SPECIALIZED AGRICULTURAL AGENT TO WORK IN MY COUNTY."

Response	Number	Percent
Agree	42	29.4
Disagree	86	60.1
No Response	15	10.5
Total	143	100.0

The number of commissioners who failed to respond to Item 11 was quite high as evidenced in Table XVII. Over 10 percent of the commissioners gave no response to this item, making it the highest category of no responses in the study. Numerous comments were written by the commissioners about this statement, indicating they would agree if funds were available or that it required official action to make a decision of this sort.

Responses to attitude statement 12 are reported in Table XVIII. Over 52 percent of the commissioners were in agreement with the proposal that farmers and other recipients of help should pay fees to defray part of the cost of specialized agents, while 41.3 percent indicated they disagreed with the fee-paying proposal.

A majority of the county commissioners agreed with statement 13 of the instrument. The data in Table XIX indicate that 59.4 percent agreed they would favor use of area

specialized agents only if necessary funds came from sources other than county tax revenue. Almost one-third of the commissioners disagreed with the statement, and 8.4 percent failed to respond.

TABLE XVIII

RESPONSES TO ATTITUDE STATEMENT 12: "FARMERS AND OTHERS WHO RECEIVE HELP SHOULD PAY FEES TO DEFRAY PART OF THE COST OF SPECIALIZED AGRICULTURAL AGENTS."

Response	Number	Percent
Agree	75	52.4
Disagree	59	41.3
No Response	9	6.3
Total	143	100.0

TABLE XIX

RESPONSES TO ATTITUDE STATEMENT 13: "I WOULD FAVOR USE OF AREA SPECIALIZED AGENTS ONLY IF FUNDS NEEDED DO NOT COME FROM COUNTY TAX REVENUE."

Response	Number	Percent
Agree	85	59.4
Disagree	46	32.2
No Response	12	8.4
Total	143	100.0

Commissioners were asked in item 14 to select from a

list of seven clientele groups the one they felt would benefit most from specialized agricultural extension help. Although they were asked to select only one group, 24 of the returns contained multiple responses. Due to the inclusion of these multiple responses, the total number of responses in Table XX is larger than the number of participants and the percentages, when totaled, exceed 100.

TABLE XX

NUMBER AND PERCENT OF COMMISSIONERS SELECTING CERTAIN
CLIENTELE GROUPS AS LIKELY TO BENEFIT MOST
FROM SPECIALIZED EXTENSION
HELP IN AGRICULTURE

Clientele Group Selected	Number	Percent
Small, Subsistence Type Farmers	13	9.1
Average Size Family Type Farmers	73	51.1
Agricultural Business Firms	13	9.1
Larger Commercial Farmers	54	37.8
Agricultural Marketing Firms	6	4.5
Part-time Farmers	7	4.9
Farm Organizations	6	4.5
No Response	10	7.0

The data in Table XX indicate that commissioners felt average farmers would receive the most benefit from special-

ized extension help in agriculture, followed by larger commercial farmers. None of the other clientele groups listed were chosen by more than 9.1 percent of the commissioners.

Comparison of Attitude Responses From
Area and Non-Area Commissioners

Responses from the two groups of county commissioners are presented separately and compared here. The "no response" category does not appear in the tables of this section, as numbers in these cells were too small for use in the chi-square analyses which were made.

TABLE XXI

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE
STATEMENT 1: "I FEEL THAT AGRICULTURE IN
MY COUNTY SHOULD HAVE MORE SPECIALIZED
EXTENSION HELP."

Response	Area Commissioners	Non-Area Commissioners
Agree	32	37
Disagree	38	32
Chi-square: .58	<u>df</u> : 1	.50 > <u>p</u> > .30

In responding to attitude statement 1, a larger number of the area commissioners agreed that more specialized extension agricultural help was needed in their counties, while commissioners from non-area counties disagreed with the statement in larger numbers. The chi-square analysis reported in Table XXI indicates the differences were not

significant. Three of the non-area and one of the area commissioners failed to respond to the item.

Table XXII presents an analysis of responses to attitude statement 2. Commissioners from the two groups responded very similarly to the statement, with only a slightly larger number of the area commissioners disagreeing with the suggestion of adding more county agents similar to those now being provided. Three of the area commissioners and seven of the non-area commissioners failed to indicate a response to the statement.

TABLE XXII

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 2:

"I BELIEVE ANY CHANGE IN EXTENSION'S EFFORTS IN
AGRICULTURE SHOULD BE TO PROVIDE MORE
COUNTY AGENTS SIMILAR TO THOSE
NOW PROVIDED."

Response	Area Commissioners	Non-Area Commissioners
Agree	25	26
Disagree	43	39
Chi-square: .042	<u>df</u> : 1	.90 > <u>p</u> > .80

When asked to respond to the third attitude statement concerning the ability of present agents to provide adequate information without the use of specialized agents, a majority of both groups of commissioners agreed that present agents were adequate. More of the area commissioners disagreed with the statement, though the difference in re-

sponses was very small. One commissioner from the area group and four from the non-area group did not respond to the statement, as the data in Table XXIII indicate.

TABLE XXIII

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 3:
 "I FEEL THAT PRESENT COUNTY AGENTS CAN PROVIDE
 ADEQUATE INFORMATION WITHOUT THE USE OF
 MORE SPECIALIZED AGENTS."

Response	Area Commissioners	Non-Area Commissioners
Agree	41	44
Disagree	29	24
Chi-square: .32	<u>df</u> : 1	.70 > <u>p</u> > .50

TABLE XXIV

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 4:
 "I FEEL IF SPECIALIZED AGRICULTURAL AGENTS
 ARE USED THEY SHOULD BE IN ADDITION
 TO PRESENT COUNTY AGENTS."

Response	Area Commissioners	Non-Area Commissioners
Agree	48	47
Disagree	21	20
Chi-square: .013	<u>df</u> : 1	.95 > <u>p</u> > .90

As the data in Table XXIV show, the two groups of commissioners responded almost identically to item 4. Two com-

missioners from the area group and five from the non-area group did not respond to the statement.

The data in Table XXV indicate that more of the commissioners from the area group disagreed with statement 5 than did those from the non-area group, though the difference was not large. Three commissioners from the area group and seven from the non-area group failed to indicate a response to the statement.

TABLE XXV

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 5:
 "I BELIEVE FUTURE EXTENSION PLANS SHOULD INCLUDE
 THE USE OF SPECIALIZED AGRICULTURAL AGENTS."

Response	Area Commissioners	Non-Area Commissioners
Agree	37	39
Disagree	31	26
Chi-square: .226	df: 1	.70 > p > .50

Differences in responses to attitude statement 6 were more pronounced than those found in any of the previous statements. The number of commissioners in the area group who disagreed with the statement that present county agents should be given special training and allowed to work in more than one county was noticeably larger than the number disagreeing from the non-area group. As indicated in Table XXVI, the differences in commissioners' responses to the above statement approached the .10 level of probability when

analyzed by the use of chi-square. One commissioner from the area group and five from the non-area group failed to respond to the item.

TABLE XXVI

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 6:
 "I BELIEVE PRESENT COUNTY AGENTS SHOULD BE TRAINED
 AS SPECIALIZED AGRICULTURAL AGENTS AND ALLOWED
 TO SHARE WORK ACROSS COUNTY LINES."

Response	Area Commissioners	Non-Area Commissioners
Agree	22	31
Disagree	48	36
Chi-square: 2.58	<u>df</u> : 1	.20 > <u>p</u> > .10

TABLE XXVII

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 7:
 "I BELIEVE SPECIALIZED AGRICULTURAL AGENTS COULD
 WORK SATISFACTORILY OVER A 6-8 COUNTY AREA."

Response	Area Commissioners	Non-Area Commissioners
Agree	35	26
Disagree	34	39
Chi-square: 1.15	<u>df</u> : 1	.30 > <u>p</u> > .20

In responding to statement 7, more of the commissioners from the area group indicated they agreed that specialized agents could work satisfactorily in a 6-8 county area than

did the commissioners from the non-area group. The responses to this item are reported in Table XXVII where it can be seen that the differences referred to are not large. Two commissioners from the area group and seven from the non-area group failed to indicate a response to statement 7.

TABLE XXVIII

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 8:
 "IF SEVERAL SPECIALIZED AGENTS WERE ASSIGNED TO AN
 AREA THEY SHOULD BE PREVENTED FROM ALL
 LIVING IN ONE COUNTY OF THE AREA."

Response	Area Commissioners	Non-Area Commissioners
Agree	54	59
Disagree	16	9
Chi-square: 1.55	<u>df</u> : 1	.30 > p > .20

Responses to attitude statement 8 are reported in Table XXVIII. While a large number of commissioners from both groups agreed with the statement, the number of non-area commissioners who agreed was slightly larger. Almost twice as many commissioners from the area group disagreed with the statement compared to the non-area group. One commissioner from the area group and four from the non-area group failed to indicate a response to the item.

Statement 9 asked commissioners to respond to the proposal of conducting all extension agricultural work through the use of specialized agents assigned to a multi-county

area. The data in Table XXIX indicate a larger number of commissioners from the area group disagreed with the statement than did those in the non-area group. Four commissioners from the area group and seven from the non-area group did not indicate a response to the statement.

TABLE XXIX

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 9:
 "I BELIEVE ALL AGRICULTURAL EXTENSION WORK SHOULD
 BE CARRIED OUT BY SPECIALIZED AGENTS ASSIGNED
 TO A 6-8 COUNTY AREA."

Response	Area Commissioners	Non-Area Commissioners
Agree	13	17
Disagree	54	48
Chi-square: .52	df: 1	.50 > p > .30

Few commissioners in either group disagreed with attitude statement 10. The number of disagree responses was much larger from the area group, however, than from the non-area group. The chi-square value from this item is reported in Table XXX and approached significance at the .05 level of probability. One commissioner from the area group and six from the non-area group failed to indicate a response to the statement.

When asked if they would be willing to allocate county funds to secure the services of a specialized agent, commissioners in both groups responded quite similarly. Responses

to this statement are reported in Table XXXI, where it may be noted that commissioners from the area group agreed with the statement a little more frequently than did those from the non-area group. Commissioners failed to respond to item 11 more often than to any other item in the instrument. Five commissioners from the area group and 10 from the non-area group did not respond to the item.

TABLE XXX

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 10:
 "I FEEL IF ALL AGRICULTURAL EXTENSION AGENTS WERE
 ASSIGNED TO A 6-8 COUNTY AREA, AN EXTENSION
 OFFICE SHOULD STILL BE KEPT IN
 EACH COUNTY."

Response	Area Commissioners	Non-Area Commissioners
Agree	59	63
Disagree	11	3
Chi-square: 3.46	<u>df</u> : 1	.10 > <u>p</u> > .05

A sizeable majority of commissioners from the area group agreed that farmers and others who receive help should pay fees for the support of specialized agricultural agents. Responses from commissioners in the non-area group were about equally divided between the agree and disagree categories. These responses are shown in Table XXXII. Two commissioners from the area group and seven from the non-area group did not indicate a response to statement 12.

TABLE XXXI

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 11:
 "I WOULD BE WILLING TO ALLOCATE COUNTY FUNDS TO SECURE
 THE SERVICES OF A SPECIALIZED AGRICULTURAL AGENT
 TO WORK IN MY COUNTY."

Response	Area Commissioners	Non-Area Commissioners
Agree	23	19
Disagree	43	43
Chi-square: .10	df: 1	.80 > p > .70

TABLE XXXII

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 12:
 "FARMERS AND OTHERS WHO RECEIVE HELP SHOULD PAY FEES
 TO DEFRAY PART OF THE COST OF SPECIALIZED
 AGRICULTURAL AGENTS."

Response	Area Commissioners	Non-Area Commissioners
Agree	42	33
Disagree	27	32
Chi-square: 1.01	df: 1	.50 > p > .30

The data in Table XXXIII show that county commissioners in the two groups responded almost identically to the statement asking them to indicate whether they favored the use of area specialized agents only if the funds needed did not come from county tax funds. Four commissioners from the area group and eight from the non-area group failed to indi-

cate a response to the statement.

TABLE XXXIII

CHI-SQUARE ANALYSIS OF RESPONSES TO ATTITUDE STATEMENT 13:
 "I WOULD FAVOR USE OF AREA SPECIALIZED AGENTS ONLY IF
 FUNDS NEEDED DO NOT COME FROM COUNTY TAX REVENUE."

Response	Area Commissioners	Non-Area Commissioners
Agree	43	42
Disagree	24	22
Chi-square: .00009	<u>df</u> : 1	1.00 > <u>p</u> > .99

Table XXXIV contains a comparison of responses to the various categories in item 14 of the instrument. In this item, commissioners were asked to indicate which one of seven clientele groups they felt would benefit most from specialized extension help in agriculture. However, 24 of the returns contained multiple responses which presented a problem in the chi-square analysis of responses from the two groups.

Oppenheim (26, p. 248), suggests that where multiple responses are received, they can be included in the categories, and each category of responses tested against all the other responses combined by using a series of 2 X 2 contingency tables. The chi-square test is calculated on the total number of cases, not the total number of responses, thus reducing the problem of lack of independence. This procedure described by Oppenheim was used in analyzing

TABLE XXXIV

CHI-SQUARE ANALYSIS OF THE NUMBER OF COMMISSIONERS
SELECTING CERTAIN CLIENTELE GROUPS AS LIKELY
TO BENEFIT MOST FROM SPECIALIZED EXTENSION
HELP IN AGRICULTURE

Category Analyzed	Clientele Group Selected	Number of Commissioners	
		Area	Non-Area
Small and Part- time Farmers	Small and Part- time Farmers	7	13
	All Other Groups	64	59
	Chi-square: 1.37	df: 1	.50 > p > .30
Average Farmers	Average Farmers	34	39
	All Other Groups	37	33
	Chi-square: .34	df: 1	.70 > p > .50
Larger Commercial Farmers	Larger Commercial Farmers	31	23
	All Other Groups	40	49
	Chi-square: 1.62	df: 1	.30 > p > .20
Agricultural Business Firms	Agricultural Business Firms	8	5
	All Other Groups	63	67
	Chi-square: .38	df: 1	.70 > p > .50
Agricultural Marketing Firms and Farm Organizations	Agricultural Marketing Firms and Farm Organizations	8	4
	All Other Groups	63	68
	Chi-square: .87	df: 1	.50 > p > .30

the responses to item 14 as shown in Table XXXIV.

Small numbers in some of the cells made it necessary to combine categories for the statistical analysis. Responses from commissioners choosing small, subsistence type farmers and those choosing part-time farmers were combined and are shown in the first part of Table XXXIV. Commissioners in the area group selected these categories less frequently than did commissioners in the non-area group, but the difference in responses was small.

The two groups of commissioners differed very little in the number choosing average sized family type farmers as the group which would benefit most from specialized extension agricultural help. These responses are shown in the second section of Table XXXIV.

A greater number of commissioners from the area group indicated they felt larger, commercial farmers would benefit most from specialized extension help. Though the difference in responses is not statistically significant, it is fairly large, as the data in Table XXXIV indicate.

Few commissioners from either group indicated they felt agricultural business firms would benefit most from more specialized help. The fourth section of Table XXXIV contains a presentation of responses to this choice.

Responses from commissioners choosing agricultural marketing firms and those choosing farm organizations were combined and appear in the last section of Table XXXIV. Twice as many commissioners in the area group selected these two

groups as did those from the non-area group, but the difference was not statistically significant.

CHAPTER V

SUMMARY, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

The primary purpose of this study was to determine the attitudes of county commissioners in Oklahoma toward the proposed use of specialized agricultural extension agents assigned to multi-county areas, and the allocation of county tax funds to support this type of extension work.

A total of 178 county commissioners were selected and asked to participate in the study. One-half were chosen from counties where extension specialized agricultural agents had been assigned to multi-county areas for approximately one year, and the other one-half selected from counties where area agricultural agents had not been assigned.

An attitude instrument was developed and mailed to the selected commissioners and 143 usable returns were received from them. Seventy-one commissioners from the area group and 72 from the non-area group participated in the study and responses from these commissioners were reported and analyzed.

Conclusions

In presenting conclusions based on the findings of the study, each study question posed in Chapter I is stated in

this section followed by conclusions related to the question.

Question 1: What are county commissioners' attitudes toward the use of area specialized agents in agriculture?

Conclusions: Findings related to question 1 are discussed in two steps. First, attitudes toward the use of specialized agents are presented, then attitudes toward assignment of specialized agents to multi-county areas are summarized.

A sizeable majority of the commissioners indicated they felt extension should plan for the use of specialized agents in agriculture in the future. However, slightly less than one-half indicated they felt agriculture in their county should receive more specialized extension help. A large proportion of the commissioners felt that specialized agricultural agents, if used, should be in addition to present county agents, and disagreed with the suggestion of training present county agents to assume the role of specialized agents.

In reacting to the proposal of assigning specialized agents to multi-county areas, slightly over one-half of the commissioners felt specialized agents could not adequately serve a 6-8 county area. A large majority expressed the belief that all agents assigned to a multi-county area should not be allowed to live in one county of the area. It was evident that the responding commissioners almost unanimously felt that an extension office should be maintained in

each county.

The belief was expressed by most commissioners that farmers living on average size farms or larger commercial farms would benefit most from specialized extension help in agriculture.

In answer to question 1, the findings lead one to conclude that a slight majority of commissioners feel specialized agricultural agents should be included in future extension plans, and that they should be provided in addition to existing county agents. A slight majority also believe specialized agents could not work satisfactorily in a 6-8 county area. Agreement was strong that area agents should be prevented from concentrating living quarters in one part of the area. They were almost unanimous in expressing agreement that an extension office should be kept in each county.

Question 2: What are county commissioners' attitudes toward the appropriation of county funds for the support of area specialized agents in agriculture?

Conclusions: Less than one-third of the commissioners indicated they would be willing to allocate county funds to secure the services of a specialized agricultural agent to work in their county, with most of them favoring the use of specialized agents only if funds needed did not come from county tax revenues.

A majority of the commissioners believe that farmers and others who receive help should pay fees to defray a part

of the cost of specialized agricultural agents.

A large number of commissioners failed to respond to items pertaining to financing of area specialized agents as evidenced by the higher number of "no responses" to these items.

In answering question 2, the conclusion is reached that most commissioners are unwilling to allocate funds from county tax reveunes to provide area specialized agricultural agents, while a slight majority feel that the recipients of help from specialized agents should pay fees for the support of such agents.

Question 3: Do the attitudes of county commissioners in counties where area specialized extension agents have been working differ significantly from those in counties where they are not assigned?

Conclusions: Commissioners from counties where area agents are currently functioning are referred to here as "area" commissioners and those from counties where area agents are not assigned are referred to as "non-area" commissioners.

Little difference was evident in attitudes expressed by the area and non-area commissioners concerning the need for specialized agricultural agents. Commissioners in the area group were slightly more opposed to the proposal of using specialized agents, and considerably more opposed to the proposal of training present county agents and allowing them to assume the role of a specialized agent.

Commissioners in the area group were more receptive to the suggestion of multi-county assignments for specialized agents than were those in the non-area group. A considerably larger number of the area commissioners believe a 6-8 county area would be a suitable assignment for a specialized agent. Commissioners from the area group indicated less concern with gaining assurance that an extension office was maintained in each county.

More commissioners in the area group were willing to allocate county funds for providing specialized agents, and they were also considerably more prone to believe that those receiving benefits should pay fees for support of the area specialized agricultural agent program.

In answer to question 3, the conclusion is that area and non-area commissioners' attitudes toward the use of area specialized agents, as measured in this study, do not differ significantly. However, differences in attitude expressed concerning the maintenance of an extension office in each county did approach the .05 level of probability, with commissioners in the non-area group favoring retention of county offices more strongly.

Limitations

Certain limitations are inherent in the study. Authenticity of responses may be a limiting factor in any study requiring a respondent to report his own attitudes. Also, due to the limited scope of the study, generalizations

should not be made beyond the areas and population outlined in the study.

Other limitations have become apparent and are called to the reader's attention here. The counties from which non-area commissioners were asked to participate were chosen by random selection. However, the counties from which area commissioners were asked to participate were a pre-determined group with no assurance of randomness, thus the total group selected may not accurately represent Oklahoma county commissioners. A related factor was that almost 20 percent of those commissioners selected to participate in the study failed to complete and return the data collection instrument.

No attempt was made in the study to ascertain how strongly the attitudes were held, nor how clearly and accurately the commissioners understand the organization and functions of the Cooperative Extension Service in Oklahoma.

Recommendations

A number of additional questions can be raised as a result of this study. Two which are closely related to the study and which warrant attention are presented below.

In view of the changes referred to in this study, and other major changes which have recently been made in Oklahoma, some assessment of the level of understanding which county commissioners have of the Cooperative Extension Service in Oklahoma should be made.

A study of county financing procedures in Oklahoma and other states should be made, with the objective of developing a recommended formula for determining the county's contribution toward the financial support of extension programs.

If counties are to contribute to the financial support of area specialized agricultural extension agents, the findings of this study support the recommendation that a program designed to inform county commissioners of the need for area specialized agents be conducted. There is no evidence here to suggest that commissioners from counties now being served by area specialized agents should be excluded from such a program. It is also recommended that the Oklahoma County Commissioners Association be involved as much as possible in any informational programs conducted.

As multi-county areas are placed in operation, it is recommended that extension offices be maintained in each county and area specialized agents be provided in addition to existing county agents, at least as an intermediate step while further evaluation of this method of organization is made.

SELECTED BIBLIOGRAPHY

- (1) A Committee of the Staff of Iowa State College. A Study of the Extension Service in Agriculture and Home Economics in Iowa. Ames: Collegiate Press, 1933.
- (2) Bailey, Fred Jr. "Extension Service Fights for Survival." Banking, LVI (December 1963), 82-83.
- (3) Blalock, T. C., Mary Nell Greenwood, and Roland H. Abrahamson. "What the Public Thinks of Extension." Journal of Cooperative Extension, I (1963), 47-54.
- (4) Carew, John. "The Role of the Extension Specialist in Agriculture." Farm Policy Forum, XI (1958-59), No. 4, 29-35.
- (5) Davis, Lloyd H. "How Are County Agents Changing?" Farm Technology, XXI (September 1965), 15, 61-62.
- (6) Davis, Lloyd H. "Our Mission as Seen From a National Point of View." Address Before Oklahoma State University Annual Extension Conference. October 10-13, 1966.
- (7) Davis, P. O. "Extension Work - Past, Present, Future." The Spirit and Philosophy of Extension Work. Ed. Robert K. Bliss. U.S.D.A.: Graduate School, 1952.
- (8) Eckland, Bruce K. "Effects of Prodding to Increase Mail-back Returns." Journal of Applied Psychology, XLIX (June 1965), 165-169.
- (9) Edwards, Allen L. Techniques of Attitude Scale Construction. New York: Appleton-Century-Crofts, Inc., 1957.
- (10) Eldridge, Eber. "A New Focus for Extension." Farm Policy Forum, XI (1958-59), No. 4, 15-24.
- (11) Frutchey, Fred P., ed. County Extension Organization and Financing Procedures. U.S.D.A.: Federal Extension Service, May 1963.

- (12) Good, Carter V. Introduction to Educational Research. New York: Appleton-Century-Crofts, 1963.
- (13) Good, Carter V., and Douglas E. Scates. Methods of Research. New York: Appleton-Century-Crofts, 1954.
- (14) Hanson, Bertil L. "County Commissioners of Oklahoma." Midwest Journal of Political Science, IX (November 1965), 388-400.
- (15) Jahoda, Marie, Morton Deutsch, and Stuart W. Cook, eds. Research Methods in Social Relations, Part 1. New York: The Dryden Press, 1951.
- (16) Johnson, Paul C. "The Challenge to Educational Agencies." Farm Policy Forum, XIII (1960-61), No. 3, 30-35.
- (17) Katz, Daniel. "The Functional Approach to the Study of Attitudes." Public Opinion Quarterly, XXIV (Summer, 1960), 163-204.
- (18) Kelsey, Lincoln David and Cannon Chiles Hearne. Cooperative Extension Work. Ithaca: Comstock Publishing Company, 1949.
- (19) Lanpher, Buel, et al. Area Agent Study. U.S.D.A.: Federal Extension Service, June 1965.
- (20) Lazarsfeld, Paul. "The Nature of Attitude Surveys." The Substance of Sociology. Ed. Ephraim H. Mizruchi. New York: Appleton-Century-Crofts, 1967.
- (21) Linsky, Arnold S. "A Factorial Experiment in Inducing Responses to a Mail Questionnaire." Sociology and Social Research, XLIX (January 1965), 183-189.
- (22) McElroy, John J. "Specialists - The Connecting Links." Extension Service Review, XXIX (April 1958), 77, 84-85.
- (23) McNemar, Quinn. "Opinion-Attitude Methodology." Psychological Bulletin, XLIII (July 1946), 289-369.
- (24) Oklahoma Higher Education Code. Oklahoma City: Oklahoma State Regents for Higher Education, September 1965.
- (25) Oklahoma Statutes 1961, Volume I. St. Paul: West Publishing Company, 1961.

- (26) Oppenheim, A. N. Questionnaire Design and Attitude Measurement. New York: Basic Books, Inc. 1966.
- (27) Ratchford, C. B. "Modernizing Extension." Report of Proceedings, Western Region Seminar in Extension Supervision, September 7-12, 1958. Madison: University of Wisconsin, National Agricultural Extension Center for Advanced Study, 1959.
- (28) Sanders, H. C., ed. The Cooperative Extension Service. Englewood Cliffs: Prentice-Hall, 1966.
- (29) Shannon, T. J. and C. A. Schoenfeld. "Whither the Cooperative Extension Service." Journal of Cooperative Extension, III (Winter 1965), 200-204.
- (30) Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company, 1956.
- (31) Smith, C. B. "Ten Years of Extension Work Under the Smith-Lever Act, 1915-1924." The Spirit and Philosophy of Extension Work. Ed. Robert K. Bliss. U.S.D.A.: Graduate School, 1952.
- (32) Soule, A. M. "Administration of the Smith-Lever Act." The Spirit and Philosophy of Extension Work. Ed. Robert K. Bliss. U.S.D.A.: Graduate School, 1952.
- (33) Stouffer, Samuel A. Social Research to Test Ideas. New York: The Free Press of Glencoe, 1962.
- (34) Sub-Committee on Scope and Responsibility of the Extension Committee on Organization and Policy. The Cooperative Extension Service Today, A Statement of Scope and Responsibility. U.S.D.A.: Federal Extension Service, April 1958.
- (35) Travers, Robert M. W. An Introduction to Educational Research. New York: The Macmillan Co., 1958.
- (36) True, Alfred Charles. A History of Agricultural Extension Work in the United States, 1785-1923. U.S.D.A. Misc. Pub. No. 15. Washington: U. S. Government Printing Office, 1928.
- (37) University Extension, OSU. Stillwater: Oklahoma State University Extension Division, 1966.
- (38) U. S. Department of Commerce, Bureau of the Census Governing Boards of County Governments: 1965. Washington: Department of Commerce, April 1965.

- (39) Wallace, David. "A Case for and Against Mail Questionnaires." Public Opinion Quarterly, XVIII (1954), 40-52.
- (40) Wert, James E. Charles O. Neidt, and J. Stanley Ahmann. Statistical Methods in Educational and Psychological Research. New York: Appleton-Century-Crofts, 1954.
- (41) White, Estelle Edwards. A Study of County Commissioner's Perceptions of the North Carolina Cooperative Extension Service, Northeast Extension District, North Carolina. Unpublished Master's Thesis. (Summary). Raleigh: North Carolina State University, August, 1965.
- (42) Young, Pauline. Scientific Social Surveys and Research. Englewood Cliffs: Prentice Hall, Inc. 1966.

APPENDIX A

DATA COLLECTION INSTRUMENTS

(Letter included in the original mailing)

County support, both in leadership and financing, is of critical importance in the conduct of County Extension Agent work. Since County Commissioners occupy a strong position of leadership, I am asking Commissioners from selected counties in Oklahoma to indicate their reaction toward some possible changes in the way Extension Agricultural work is conducted.

On April 4, I visited with Mr. James Tooley, President of your Oklahoma County Commissioners Association about my plans to conduct the study and he made the following comment:

I feel the study is important and merits County Commissioners taking their time to complete and return the form. I would appreciate it if those Commissioners selected would respond.

I hope you also feel the study is worthy of your time.

The enclosed form is easy to fill out and should take only 10 to 15 minutes to complete. The number of counties selected to participate in the study is relatively small, so your response is especially important. A Code No. is assigned so I can determine which forms are not returned and send reminders if necessary.

Thank you for your cooperation in this request.

Sincerely yours,

Charles E. Campbell

INFORMATION FORM

Please return in the
enclosed envelope to:

Code No. _____

Charles E. Campbell
308 Gundersen Hall
Stillwater, Okla. 74074

INSTRUCTIONS: Do not put your name on the form. Information you give will be reported in such a way that your individual response will not be revealed.

Please check following each question the statement which is applicable.

1. Your age: ☐ Under 40
☐ 40-49
☐ 50-59
☐ 60 or over
2. Your major occupation: ☐ Farming or ranching
☐ Construction or contracting
☐ Merchant or businessman
☐ Real estate
☐ Other(Please list) _____
☐ No private occupation
3. Years you have served as a County Commissioner (counting this year): ☐ 4 or less
☐ 5-9
☐ 10-14
☐ 15 or more
4. Your education (check the highest level completed):
☐ Grade school
☐ High school
☐ Some college
☐ College graduate
5. Have you or a member of your family participated in Extension programs in your county? ☐ 4-H
☐ Home Demonstration Clubs
☐ Agricultural Information
☐ None

POSSIBLE CHANGES

It has been suggested that the County Extension Agent Program in Oklahoma should provide more specialized help for people engaged in agriculture. Three changes seem probable if this is to be done.

1. Local Extension Agricultural Agents would need to be more highly trained in some specific subject matter area (field crops, beef, irrigation, farm management, etc.) as compared to the present agents who tend to have general training in all fields of agriculture. They would need to be specialized agricultural agents.

2. These specialized agricultural agents would, in many cases, be assigned to an area consisting of more than one county --possibly 6 to 8 counties. They could be used in addition to present county agents or all agents could be specially trained and work over an area with none of them assigned to a specific county.

3. Some changes in county financing of extension work might be required.

INSTRUCTIONS: Please respond by checking (✓) at the right whether you agree or disagree with the following statements. There are no right or wrong answers to the statements, just give your reaction to them.

Please do not skip any statements.

	<u>AGREE</u>	<u>DISAGREE</u>
1. I feel that agriculture in my county should have more specialized Extension help.	_____	_____
2. I believe any change in Extension's efforts in agriculture should be to provide more county agents similar to those now provided.	_____	_____
3. I feel that present county agents can provide adequate information without the use of more specialized agents.	_____	_____
4. I feel if specialized agricultural agents are used they should be in addition to present county agents.	_____	_____
5. I believe future Extension plans should include the use of specialized agricultural agents.	_____	_____

- | | <u>AGREE</u> | <u>DISAGREE</u> |
|--|--------------|-----------------|
| 6. I believe present county agents should be trained as specialized agricultural agents and allowed to share work across county lines. | _____ | _____ |
| 7. I believe specialized agricultural agents could work satisfactorily over a 6-8 county area. | _____ | _____ |
| 8. If several specialized agents were assigned to an area they should be prevented from all living in one county of the area. | _____ | _____ |
| 9. I believe all Agricultural Extension work should be carried out by specialized agents assigned to a 6-8 county area. | _____ | _____ |
| 10. I feel if all Agricultural Extension Agents were assigned to a 6-8 county area, an extension office should still be kept in each county. | _____ | _____ |
| 11. I would be willing to allocate county funds to secure the services of a specialized agricultural agent to work in my county. | _____ | _____ |
| 12. Farmers and others who receive help should pay fees to defray part of the cost of specialized agricultural agents. | _____ | _____ |
| 13. I would favor use of area specialized agents only if funds needed do not come from county tax revenue. | _____ | _____ |
| 14. Check below which one of the following groups you feel would benefit most from more specialized Agricultural Extension help. | | |
| _____ Small, subsistence type farmers | | |
| _____ Average size family type farmers | | |
| _____ Agricultural business firms | | |
| _____ Larger commercial farmers | | |
| _____ Agricultural marketing firms | | |
| _____ Part-time farmers | | |
| _____ Farm organizations | | |

Postcard reminder sent to non-responding commissioners
at the end of the first week:

You recently received a form from me asking for your reactions to some aspects of County Extension Agent work. As yet I have not received your completed form.

I want to say again that your response is of utmost importance to me in completing the study, and I earnestly solicit your cooperation.

I would appreciate it very much if you would take time to complete the form and return it to me. Disregard this note if you have already mailed it.

Sincerely yours,

Charles E. Campbell

Postcard reminder sent to non-responding commissioners
at the end of the second week:

Dear Mr. _____;

I have not yet received your completed form for the County Extension study I am conducting. Several forms have been received recently.

Won't you take this opportunity to register how you feel about the proposed changes.

The County Commissioners Ass'n. and the Extension Service have indicated much interest in the study, and the findings will be made available to both.

Since future decisions may be shaped by the results of the study, your response is urgently needed.

Sincerely yours,

Charles E. Campbell

(Letter included in the second mailing)

May 12, 1967

I am writing to again solicit your cooperation in reacting to some possible changes in the way Agricultural Extension (County Agent) work is carried out. I do need your response, and am enclosing another form in case you failed to receive the one I sent earlier.

As noted in my previous correspondence, the study has the support of both the County Commissioners Association and the Extension Service.

The response up to now has been good. I have received forms from over 60% of those Commissioners asked to participate in the study. However, to make the results most meaningful and useful, returns from 100% are needed.

Would you please complete the enclosed form and return it to me right away. Thank you for your help.

Sincerely yours,

Charles E. Campbell

VITA

Charles E. Campbell

Candidate for the Degree of
Doctor of Education

Thesis: OKLAHOMA'S COUNTY COMMISSIONERS' ATTITUDES TOWARD
THE USE OF AREA SPECIALIZED AGRICULTURAL EXTENSION
AGENTS

Major Field: Educational Administration

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Personal Data: Born at Fristoe, Missouri, November 9,
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Education: Graduated from Warsaw High School, Warsaw,
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Professional Experience: Employed as Vocational Agri-
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of Missouri as Linn County Extension Director from
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Professional Organizations: Missouri Association of
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