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THE ROLE OF THE AREA EXTENSION HORTICULTURAL SPECIALIST IN  
THE COOPERATIVE EXTENSION SERVICE OF KANSAS

by

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A MASTER'S THESIS

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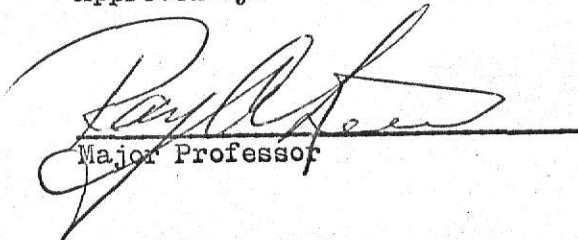
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## CHAPTER I

### INTRODUCTION

#### I. PURPOSE AND NEED

The purpose of this study was to clarify the role of the area horticultural specialist, operating in a small number of counties in the Kansas Cooperative Extension Service.

Attempts in the past to determine the role of the specialist have been in general terms only. There has been no position in the state of Kansas for a horticultural specialist on an area basis. It is hoped that this study will give a clearer picture of the position of an area horticultural specialist within the Kansas Extension program.

In order to interpret, the role of the area horticultural specialist into the existing organization, there must be an understanding of the demands and expectations of the extension personnel involved. Sargent defines role as "a pattern or type of social behavior which seems situationally appropriate to him in terms of the demands and expectations of those in his group."<sup>1</sup>

It was also hoped that surveying area horticultural specialists in states where such a position does exist may help clarify the role by utilizing the experience of those in the position.

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<sup>1</sup>Stansfeld Sargent, "Concepts of Role and Ego in Contemporary Psychology," Social Psychology at the Cross-Roads, ed. John H. Rohrer and Musesafer Sherif (New York: Harper and Brothers, 1951), p. 360

## BACKGROUND

The Cooperative Extension Service was established with the Smith-Lever Act of 1914. This act states that Extension work is to "aid in diffusing among the people, useful and practical information on subjects related to agriculture and home economics and to encourage the application of the same. . . Extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or residing in said colleges. . . through field demonstrations, publications, and otherwise. . ."<sup>2</sup>

Senator Vardaman, Mississippi, in support of the Smith-Lever Act in 1914 stated, "Now the purpose of this bill is to help the tillers of the land to discover the hidden riches of the soil. . . It's splendid purpose is to improve the man, enlarge his mental horizon, and give intelligent direction to his efforts. The effect will also be to add comforts to the home. . ."<sup>3</sup>

Changes in the distribution of our population have been striking. At the time of the Smith-Lever Act most of the population lived on farms with only a few people living in the urban areas. The extension program was set up to assist the rural families to have a better life. Over the

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<sup>2</sup>U. S. Department of Agriculture and Association of Land-Grant Colleges and Universities, Joint Committee Report on Extension Programs, Policies, and Goals, (Washington: U. S. Government Printing Office, (1948), p. 6.

<sup>3</sup>G. L. Carter, Jr. and Robert C. Clark, (Comp. and ed.) Selected Readings and References in 4-H Club Work, (Madison, Wisconsin: Published by the National Agricultural Extension Center for Advanced Study, University of Wisconsin, 1961), pp. 10-11.

years there has been a continual migration from the rural areas to the more urban areas. According to J. E. Palleson, Kansas State Statistician at Topeka, in 1971 only about 11.9% of the population of the state of Kansas live on farms and 88.1% live in the small towns and cities.

When reading the Smith-Lever Act, it is found that the responsibility "to aid in diffusing among the people useful and practical information on subjects relating to agriculture. . .and to encourage the application of same. . ." is just as binding today with urban people as it was in the past with rural people.

The main concern of most urban people with receiving instruction in agriculture is in the area of horticulture; lawns, shade trees, gardens, flowers, landscaping, and related problems.

In 1963 the organizational structure of extension at Kansas State University was changed by the college administration and this put the horticultural specialist administratively within the department of horticulture of the university, rather than with the division of extension. The theory behind this change in administrative direction was that the department head could better coordinate both research and extension activities. Since no area horticultural specialist position exists in Kansas, with the rapidly changing information from research, and with a changing organization, it is difficult to understand what is expected by the supervisors, fellow specialists and the county extension agents with whom the area horticultural specialist must work.

Wilber E. Ringler, Assistant Director of Extension, Kansas, summarized this problem by stating:

The importance of having each subject matter specialist clearly understand his role cannot be over-emphasized. His duties, responsibilities and his status in the organization should be clearly defined. Lacking full knowledge and requirements of his job, his duties, his responsibilities, his status in the organization, the specialist can never be sure of the adequacy of his performance, the correctness of his decisions, or his relations with those with whom he works.<sup>5</sup>

It is hoped that this study will provide some additional information to an understanding of the role of an area extension horticultural specialist in the Kansas Cooperative Extension Service.

#### THEORETICAL ORIENTATION

This study was based on the concepts and procedures set forth by Gross, Mason, and McEachern in their book Exploration in Role Analysis.<sup>6</sup>

Their idea of the role concept is summed up in this statement:

People do not behave in a random manner; their behavior is influenced to some extent by their own expectations and those of others in the group or society in which they are participants.<sup>7</sup>

Sargent speaks of, ". . .the demands and expectations of the group."<sup>8</sup>

This study examines the various expectations in relation to the role of the area extension horticultural specialists in Kansas.

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<sup>5</sup>Wilber E. Ringler, "Role of Extension Specialists and Their Status in Relation to Research and Teaching Personnel in Agronomy and Soils Departments of the North Central Region 1956." (unpublished Ph.D. thesis, University of Wisconsin, Madison, 1957).

<sup>6</sup>Neal Gross, Ward S. Mason, and Alexander W. McEachern, Explorations in Role Analysis, (New York: John Wiley and Sons, Inc., 1958).

<sup>7</sup>Ibid., p. 17.

<sup>8</sup>Sargent, op. cit., p. 360

## DEFINITIONS OF CONCEPTS

Following are definitions of terms to be used in this study:

Area horticultural specialist or Agent: A subject matter specialist in the Cooperative Extension Service who is responsible for the information and education on horticulture in a pre-determined group of counties.

State horticultural specialist: A subject matter specialist in the Cooperative Extension Service who is responsible for information and education in one or more commodities of horticulture for the total state.

Extension Administrator or administrator: A person in Extension Administration on the state level and the academic department heads with administrative responsibilities over the horticultural specialists.

County horticultural agents: Employees in county positions who are responsible for the educational horticultural program of the Cooperative Extension Service within a given county.

Role: What an individual does as an occupation within an organization.

Respondent group: A group of individuals surveyed who are administrators, area horticultural agents, or occupy like positions within the extension organization.

Functions: A specific task or duty usually performed by the horticultural specialist.

Position: The job of an individual or a group of individuals within an organization.

## OBJECTIVES

The objectives of this study were as follows:

1. To determine the amount of agreement among the four defined respondent groups — Extension administrators, county horticultural agents, area horticultural agents, and state horticultural specialists — on the functions of an area horticultural agent.
2. To determine the relative degree of importance attached to certain selected specialist functions by the four extension groups, both collectively and separately.
3. To make comparisons between the emphasis the four extension groups believe should be placed on these selected specialist functions and the emphasis the specialists and agents of Kansas believe should be placed on these functions.

## STATEMENT OF HYPOTHESES

Each analysis begins with an objective. Hypotheses are accepted or rejected through the use of statistical techniques. To aid in the calculations the hypotheses were stated in the null form. "The null hypothesis does not necessarily reflect the scientist's expectations but is used principally because it is better fitted to our statistical techniques, many of which are aimed at measuring the likelihood that a difference found is truly greater than zero."<sup>9</sup>

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<sup>9</sup>Walter R Borg, Educational Research an Introduction. (New York: David McKay Company, Inc., May 1967), p. 32.

### HYPOTHESES

1. There will be no significant agreement between the respondent groups on the functions of the area horticultural agent.
2. The respondent groups will, collectively, give a ranking to the selected functions and this ranking will not agree with the ranking of each respondent group.
3. There will be a significant difference between the emphasis the agents and specialists in horticulture in Kansas feel should be placed on these horticultural functions compared with the emphasis the respondents from other states feel should be placed on these functions.

### SCOPE AND PROCEDURE

This study was confined to the assumed role of the area horticultural agent in the Cooperative Extension Service. This included all county horticultural agents in Kansas; all known area horticultural agents from other states; all Kansas state horticultural specialists, and a sampling of every fourth state horticultural specialist listed in the National County Agents Directory; and a selected group of administrators from each state which has the area horticultural agent position, or a large number of state horticultural specialists.

The role of the specialist was examined in terms of twenty-three major functions that were identified from literature, research studies and the practical experience of Kansas Extension personnel. The role of

the specialist was evaluated from the expectations of the extension administrators, county horticultural agents, area horticultural agents in similar although not corresponding positions, and state horticultural specialists. The functions of this position as perceived by these four respondent groups were compared and analyzed.

Of the designated specialist functions each was rated by all persons in the four respondent groups. Each function was evaluated on the basis of desired emphasis.

Data gathering was accomplished by the use of a mailed questionnaire. The questionnaire form was patterned after one developed by a group of graduate students conducting a total comprehensive study of the roles of Kansas Extension workers.

Information on the face data of the questionnaire allowed identification and categorization of the responses. However, no attempt was made in the questionnaire to identify an individual respondent by name.

The respondents in this study included those who chose to respond from the total number area horticultural specialists or agents in the United States, a random sampling of state horticultural specialists, all Kansas county horticultural agents, and selected state administrators from states with a large number of horticultural personnel.

Various statistical techniques were used to analyze the data, including mean scores, rank, percentage distribution, and Pearson product moment correlation.<sup>10</sup>

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<sup>10</sup>Henry E. Garrett, Elementary Statistics. second edition, (New York: David McKay Company, Inc., March 1966), p. 90.



The data were analyzed on the basis of a numerical value assigned to the descriptive terms or ratings of the various specialist functions. An over-all mean weighted score was determined for each function by averaging the scores of all respondents. Also, mean scores by each respondent group were determined for each function. The specialist functions were then ranked by these mean scores and comparisons made among the respondent groups.

Comparison was also made between what the Kansas horticultural specialists and county horticultural agents believe the emphasis should be on the specialist functions and what emphasis the respondent groups from other states feel should be on these functions.

Tables were set up to show the various mean scores, rank, and percentile distributions of the specialist functions by the different respondent groups.

The scope of this study was limited to the area horticultural specialist in the Cooperative Extension Service. It is realized that similar groups outside of the area horticultural specialist will influence the specialist role so the corresponding area specialists from other states were included in this study.

The study was further confined to examining the specialist role in terms of twenty-three selected major functions.

The number and positions of respondents are shown in Table I.

TABLE I  
NUMBER OF RESPONDENTS, BY POSITION

Position	Potential Respondents	Respondents	
		Number	Percent
State horticultural specialists	40	30	75.00
Area horticultural agents	39	33	84.62
State administrators	14	12	85.71
County horticultural agents	6	6	100.00
Total	99	81	81.81

The rank-difference coefficient of correlation was determined by using a coefficient of correlation called ( $r$ ) or rho to test the agreement between the groups on the functions as ranked by the respondents. The formula used was from Garrett.<sup>11</sup>

$$r \text{ (rho)} = 1 - \frac{6 \sum D^2}{N(N^2 - 1)}$$

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<sup>11</sup>Ibid., p. 91.

## CHAPTER II

### REVIEW OF LITERATURE

The literature revealed studies by Strickler, Ringler, Blalock and Couch on the general role of the agricultural specialist. Some of these studies were similar in scope to this study, but none were found that specifically studied the horticultural specialist. Since there is currently no such position on an area basis in the state of Kansas, no one, to this researcher's knowledge, has tried to determine what the role of an area horticultural specialist might be.

Strickler analyzed the role expectations of similar respondent groups concerning the position of agricultural specialist in Kansas Extension. His findings were that there was a low agreement between the administrators and the county agents about what the role of the agricultural specialist should be and what it currently is. The county agents felt the specialists were doing what they should be doing and the administrators felt there was a low relationship between what the specialist should be doing and what they actually were doing.<sup>1</sup>

With the ever-changing program of the extension service, new program positions are being tried constantly. Methods of education in

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<sup>1</sup>J. Strickler, "A Study of the Role Expectations of Extension Administrators, County Agricultural Agents, and the Specialists Themselves, Concerning the Job of the Agricultural Extension Specialist in Kansas." (unpublished Master's thesis, Kansas State University, Manhattan, Kansas, 1967), pp. 1-90.

the early days were different from the methods used in later years. Changes were necessitated by factors including an increased education of the clientele, increased technology, and expansion of mass communication media, such as telephones, automobiles and television.<sup>2</sup>

With this idea in mind, and with the increasing tax load that counties are asked to bear, it is logical to assume that an agent or specialist, to meet the needs of the decreasing rural population, might be hired on an area basis.

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<sup>2</sup>Ralph D. Calvin and Abner S. McArthur, "Extension's Changing Role," Farm Journal, LXXX (October, 1952), p. 61.

# THE ROLE OF THE AREA EXTENSION HORTICULTURAL SPECIALIST

## IN THE COOPERATIVE EXTENSION SERVICE OF KANSAS

### AS PERCEIVED BY RESPONDENTS

#### I. INTRODUCTION

The data were derived from a structured questionnaire submitted to four groups of respondents listed below:

1. Kansas county Extension Horticultural Agents plus a county horticultural agent in Texas.
2. All Kansas state horticultural specialists plus a stratified random sample of all known state horticultural specialists from states listing such a position.
3. All known area horticultural agents or specialists in the United States.
4. An administrator from each state which had area horticultural positions or a large number of state horticultural specialists.

A mean weighted score was computed for each function from the four groups of respondents. The function with the highest mean weighted score was given a rank of one, the next highest was given a rank of two, etc., throughout the twenty-three functions. When a tie was observed in the rankings the bracket-rank method was used. "Since we do not know in what order these . . . should be put we simply rank all (of them the same)" and the one that follows is given the same rank it would have had if

there had been no ties.<sup>1</sup>

The null hypotheses were rejected at the .05 level of significance when the correlation was above .410 and at the .01 level when the correlation was above .530 according to Table III in Garrett<sup>2</sup> with 21 degrees of freedom.

## II. ANALYSIS AND INTERPRETATION OF DATA

### Objective 1

To determine the amount of agreement among the four defined respondent groups — extension administrators, county horticultural agents, area horticultural agents, and a sampling of state horticultural specialists — on the functions of an area horticultural agent.

The agreement between groups of respondents as they perceived the importance of the selected functions, determined by coefficient of rank correlation, is shown Table II. Table III shows the comparative relationship between the twenty-three functions as perceived by the four respondent groups.

Among the first ten functions listed by the four groups of respondents, six were included by all groups of respondents. The number one ranked function was ranked number one by all groups. The six functions are listed below:

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<sup>1</sup>Henry E. Garrett, Elementary Statistics. second edition, (New York: David McKay Company, Inc., March 1966), p. 90.

<sup>2</sup>Ibid., p. 184.

1. Working with commercial horticulture producers, greenhouses, nurseries, etc.
2. Co-ordinating county programs among the counties for which the area agent is responsible.
3. Conducting educational programs through commercial horticultural producers, garden stores, nurserymen, etc.
4. Preparation and release of horticultural information to news media.
5. Preparation and presentation of radio and television talks on horticulture.
6. Relaying needs of county people to the University for further research.

The greatest amount of disagreement was on the function of troubleshooting problems on horticulture as identified by the county agent. The county horticultural agents ranked this function as 13 while the area horticultural agents and the state administrators ranked it third. There was also disagreement on this function between the area horticultural agents, who ranked it third, and the state horticultural specialists who ranked it ninth.

There was a wide range of disagreement between the county horticultural agents and the state administrators on two other functions. On the preparation of informational sheets on horticulture for use on radio and TV, the county horticultural agents ranked this function as tied for first and the state administrators ranked it eleventh. On teaching the environmental benefits from the use of horticultural plant materials to



TABLE II  
COEFFICIENT OF RANK CORRELATION  
BETWEEN RESPONDENT GROUPS

Correlated groups	Value of rho	Level of signif.
County hort. agents — Area hort. agents	$r = .754$	.01
County hort. agents — State hort. specialists	$r = .805$	.01
County hort. agents — State administrators	$r = .651$	.01
Area hort. agents — State hort. specialists	$r = .946$	.01
Area hort. agents — State administrators	$r = .873$	.01
State hort. specialists — State administrators	$r = .888$	.01

TABLE III  
RANK ORDER OF IMPORTANCE OF AREA EXTENSION HORTICULTURAL AGENT FUNCTIONS  
AS PERCEIVED BY RESPONDENTS

Functions	Rank by respondents				
	Co. Hort Agt.	Area Hort Agt.	St. Hort Spec.	St. Adm.	Total
Working with commercial horticulture producers, greenhouses, nurseries, etc.	1	1	1	1	1
Co-ordinating county programs among counties in the geographic area for which the area agent is responsible.	3	2	2	3	2
Conducting educational programs through commercial horticulture producers, garden stores, nurserymen, etc.	3	7	3	1	3
Preparing and releasing of horticultural information to news media.	3	5	4	7	4
Preparing and presenting radio and television talks on horticulture.	3	4	7	8	5
Relaying needs of the county people to the university for further research.	9	5	5	5	6
Trouble-shooting problems of horticulture as identified by county agents.	13	3	9	3	7
Preparing informational sheets for use on radio and television.	1	10	8	11	8
Helping county extension personnel evaluate programs that have been conducted in the area of horticulture in the county.	13	7	6	5	9
Assisting in the development of the community and its' resources.	9	11	12	8	10
Working with retail store operators.	7	14	14	10	11
Developing slide & script sets on horticulture for county agent use.	7	12	11	15	11

TABLE III (continued)

Functions	Rank by respondents				
	Co. Hort Agt.	Area Hort Agt.	St. Hort Spec.	St. Adm.	Total
Training county agricultural agents	17	9	10	13	13
Providing specific horticultural problem information to homeowners in the counties.	9	13	13	17	14
Working with youth such as 4-H, FFA, Scouts, etc.	13	15	16	17	15
Teaching the environmental benefits from the use of plantings around the home to the homeowner.	9	18	16	19	16
Training 4-H leaders.	18	19	15	11	17
Training homeowners.	13	16	18	17	18
Organizing and coordinating horticultural youth groups or clubs.	19	20	21	13	19
Organizing and coordinating horticultural ADULT groups or clubs. (Garden clubs, etc.)	19	17	20	20	20
Teaching the nutritional benefits of home gardening to low income families.	22	21	19	20	21
Teaching the nutritional benefits derived from the home garden to the home gardener.	21	22	22	23	22
Presenting programs on the nutritional benefits of home gardening to civic groups	23	22	22	22	23

the homeowner, the county horticultural agents ranked this function ninth and the administrators ranked it 19th. The state horticultural specialists and the area horticultural agents ranked this function 16 and 18 respectively.

Hypothesis number one stated below was rejected.

Hypothesis 1. There will be no significant agreement between the respondent groups on the functions of the area horticultural agent.

### Objective 2

To determine the relative degree of importance attached to certain selected specialist functions by the four respondent groups, both collectively and separately.

Table III shows the rank order importance of the functions as they should be performed.

Agreement was high as to the rank of these functions. The coefficients of rank correlation between each of the four respondent groups, and the rank order of all respondents, are listed in Table IV. All four respondent groups ranked the same six functions in the first ten in order of importance as shown on page 16.

Working with commercial horticulture producers, greenhouses, nurseries, etc. was ranked number one by all respondent groups.

Conducting educational programs through commercial horticulture producers, garden stores, nurserymen, etc. was also ranked number one by the state administrators.

Preparation of informational sheets for use on radio and television

TABLE IV  
COEFFICIENT OF RANK CORRELATION BETWEEN RESPONDENT  
GROUPS AND ALL RESPONDENTS

Respondent group	Value of rho	Level of signif.
County horticultural agents	$r = .866$	.01
Area horticultural agents	$r = .954$	.01
State horticultural specialists	$r = .973$	.01
State administrators	$r = .909$	.01

was tied for a number one rating by the county horticultural agents.

Hypothesis number two stated below was rejected.

Hypothesis 2. The respondent groups will, collectively, give a ranking to the selected functions and this ranking will not agree with the ranking of each respondent group.

### Objective 3

To make comparisons between the emphasis the horticultural agents and specialists of Kansas believe should be put on these selected functions and what emphasis horticultural area agents, state specialists and state administrators from other states believe should be placed on these functions.

Table V shows how respondents from Kansas ranked the order of importance of the functions of an area extension horticultural agent as compared to the rank order of importance as given by all respondents from out of state. Agreement was fairly high between the two respondent groups. The rank correlation coefficient for the respondents in the two categories was .739.

Of the top ten ranked functions of each respondent group, seven were ranked by both groups. The seven functions were:

1. Working with commercial horticultural producers, greenhouses, nurserymen, etc.
2. Conducting educational programs through commercial horticultural producers, garden stores, nurserymen, etc.
3. Co-ordinating county programs among the counties in the geographic area for which the area agent is responsible.

TABLE V  
RANK ORDER OF AREA EXTENSION HORTICULTURAL AGENT FUNCTIONS  
AS PERCEIVED BY RESPONDENTS FROM KANSAS AND OTHER STATES

Functions	Rank by respondents	
	Kansas Ext. hort. Personnel	Other States
Working with commercial horticultural producers, greenhouses, nurseries, etc.	1	1
Conducting educational programs through commercial horticultural producers, garden stores, nurserymen, etc.	1	3
Working with retail store operators.	3	14
Preparing and presenting radio and television talks on horticulture.	4	6
Co-ordinating county programs among the counties in the geographic area for which the area agent is responsible.	5	2
Trouble-shooting problems of horticulture as identified by the county agents.	5	7
Preparing informational sheets for use on radio and television.	5	9
Developing slide and script sets on horticulture for county agent use.	5	12
Providing specific horticultural problem information to homeowners in the county.	5	13
Assisting in the development of the community and its' resources.	10	11
Preparing and releasing of horticultural information to news media.	10	4
Teaching the environmental benefits from the use of plantings around the home to the homeowner.	12	18

TABLE V (continued)

Functions	Rank by respondents	
	Kansas Ext. hort. Personnel	Other States
Relaying needs of the county people to the University for further research.	13	4
Helping county extension personnel evaluate programs that have been conducted on the area of horticulture in the counties.	14	8
Working with youth such as 4-H, FFA, Scouts, etc.	14	17
Training 4-H leaders.	16	15
Training county agricultural agents.	17	10
Training homeowners.	17	16
Organizing and coordinating horticultural YOUTH groups or clubs.	19	20
Organizing and coordinating horticultural ADULT groups or clubs.	20	19
Teaching the nutritional benefits of home gardens to low income families.	21	21
Teaching the nutritional benefits derived from home gardens to the home gardener.	21	23
Presenting programs on the nutritional benefits of home gardens to civic groups.	23	22



4. Preparation and presentation of radio and television talks on horticulture.
5. Trouble-shooting problems of horticulture as identified by the county agents.
6. Preparation and release of horticultural information to news media.
7. Preparation of informational sheets for use on radio and television.

Working with commercial horticultural producers, greenhouses, nurseries, etc. was ranked number one by both respondent groups.

The most disagreement between horticultural agents and specialists of Kansas compared with comparable positions in other states was on the question of working with retail store operators. The Kansas horticultural agents and specialists ranked the function as number three. Out of state respondents ranked the function number 14.

Hypothesis number three, stated below, was rejected.

Hypothesis 3. There was a significant difference between the emphasis the agents and specialists in horticulture in Kansas feel should be placed on these horticultural functions and the emphasis the respondents from other states feel should be placed on these functions.

### III. SUMMARY

The purpose of this study was to determine the role of the area horticultural subject matter specialist or agent in the Kansas Cooperative Extension Service as perceived by the county horticultural agents of

Kansas, the area horticultural agents or specialists of other states, a random sampling of state horticultural specialists and a select group of state extension administrators from states with a large horticultural staff.

There was high agreement among the four extension groups on the functions of an area horticultural agent. The coefficients of rank correlation between the different groups of respondents were as follows:

1. Position

- a. County hort. agt. — Area hort. agt.  $r = .745$
- b. Co. hort. agt. — State hort. spec.  $r = .805$
- c. Co. hort. agt. — State administ.  $r = .651$
- d. Area hort. agt. — State hort. spec.  $r = .946$
- e. Area hort. agt. — State admin.  $r = .873$
- f. State hort. spec. — State admin.  $r = .888$

2. Order of importance that should be attached to those area agent functions as perceived by each respondent group compared with the rank order of all respondents.

- a. County horticultural agents  $r = .866$
- b. Area horticultural agents  $r = .954$
- c. State horticultural specialists  $r = .973$
- d. State administrators  $r = .909$

3. The order of importance of the area horticultural agent functions compared between the horticultural personnel, county and state specialists, of Kansas and the area horticultural agents, state horticultural specialists, and state administrators of

other states. The correlation was fairly high between these two respondent groups at  $r = .739$ .

Among the first ten functions ranked by the four respondent groups, six were included by all groups. The number one ranked function was ranked number one by all groups. The six functions were:

1. Working with commercial horticultural producers, greenhouses, nurseries, etc.
2. Co-ordinating county programs among the counties for which the area agent is responsible.
3. Conducting educational programs through commercial horticultural producers, garden stores, nurserymen, etc.
4. Preparing and releasing of horticultural information to news media.
5. Preparing and presenting radio and television talks on horticulture.
6. Relaying needs of county people to the University for further research.

## CHAPTER IV

### CONCLUSIONS

The data were collected by a structured mail questionnaire and presented in the form of tables. They were analyzed by means of rank order coefficient of correlation in order to accept or reject the null hypotheses.

Hypothesis 1: There will be no significant agreement between the respondent groups on the functions of the area horticultural agent.

The hypothesis was rejected because of the high agreement among the four respondent groups as determined by the coefficient of rank correlations. The rho values are listed in Table II, page 17.

Hypothesis 2. The respondent groups will, collectively, give a ranking to the selected functions and this ranking will not agree with the ranking of each respondent group.

The hypothesis was rejected because the coefficient of rank correlation indicated a high degree of agreement between how each respective respondent group ranked the functions and how they were ranked by the total group. The coefficient of rank correlation for each group as compared to the total rank are listed in Table IV on page 21.

Hypothesis 3. There will be a significant difference between the emphasis the agents and specialists on horticulture in Kansas feel should be placed on the horticultural functions and the emphasis the respondents from other states feel should be placed on these functions.

Hypothesis number three was rejected because of the high agreement between the two categories of Kansas county and state horticultural personnel and respondents from other states as determined by coefficient of rank correlation.

The agreement between these two groups, on the order the functions should be performed, was fairly high. The correlation determined by coefficient of rank correlation was .739.

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BIBLIOGRAPHY**

## SELECTED BIBLIOGRAPHY

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## APPENDIX

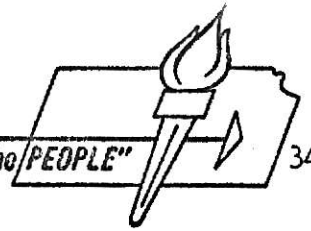
Cooperative

# EXTENSION SERVICE

of Kansas State University

RUSSELL COUNTY EXTENSION SERVICE  
125 East 7th Street  
Russell, Kansas 67665  
Phone: 913 483-3157

"Taking the UNIVERSITY to the PEOPLE"



34

October 13, 1971

Dear Friend:

Would you please take about 5 minutes of your time and answer the questions on the enclosed sheets?

I am currently working on a masters degree at Kansas State University and I have chosen a problem of studying the role of an Area Extension Horticulture Agent. This means an extension horticulture specialist who works with a limited number of counties within a geographic area of the state. We do not have such a position in the Kansas Extension Service at the current time but with finances as they are we may want to work on the area basis in the future.

I am contacting as many horticulture agents in the U.S. as I can find for their opinions and I am also contacting some state and county administrative staff to sample their opinions.

Would you please answer the questions as to the emphasis that you feel should be given the function?

You may sign the sheets if you wish and you may make comments on the bottom of the second page. If you would like a copy of the results, please give me your name and indicate you wish a copy.

Please place the questionnaire in the return envelope provided and mail it back as soon as possible.

Thank you for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Sylvester O. Nyhart".

Sylvester O. Nyhart  
County Extension 4-H Agent  
Box 671 125 East Seventh  
Russell, Kansas 67665

SON:jr  
Enc.

# FUNCTIONS OF AN AREA EXTENSION

## HORTICULTURE AGENT

35

1. \_\_\_\_\_ Name of your county and State.
2. \_\_\_\_\_
3. \_\_\_\_\_

4. Which group do you represent in the Extension Service?

1. \_\_\_\_\_ County Horticulture Agent.
2. \_\_\_\_\_ Area Horticulture Agent.
3. \_\_\_\_\_ State Horticulture Specialist.
4. \_\_\_\_\_ Administrative Staff, State.
5. \_\_\_\_\_ Administrative Staff, County.

5. How many years have you been in the Extension Service counting this year?

1. \_\_\_\_\_ One year.
2. \_\_\_\_\_ Two to five years.
3. \_\_\_\_\_ Over five years.

6. Are you now or have you been an area extension horticulture agent?

1. \_\_\_\_\_ yes
2. \_\_\_\_\_ no

### FUNCTIONS OF AREA

#### EXTENSION HORTICULTURE AGENTS

Emphasis that should be given function

	major	impor- tant	inter- mediate	minor	none
7. Training county agricultural agents.					
8. Training homeowners.					
9. Training 4-H leaders.					
10. Conducting educational programs through commercial horticulture producers, Garden stores, nurserymen, etc.					
11. Working with commercial horticulture producers, greenhouses, nurseries, etc.					
12. Working with retail store operators.					
13. Working with youth such as 4-H, FFA, scouts, etc.					
14. Organizing and coordinating horticulture YOUTH groups or clubs.					
15. Organizing and coordinating horticulture ADULT groups or clubs. (Garden clubs, etc.)					
16. Providing specific horticulture problem information to homeowners in the county.					
17. Trouble-shoot problems of horticulture as identified by the county agents.					
18. Co-ordinate county programs among the counties in the geographic area for which the area agent is responsible.					

FUNCTIONS OF AREA EXTENSION HORTICULTURE AGENTS (continued)	Emphasis that should be given function				
	major	impor- tant	inter- mediate	minor	none
19. Help county extension personnel evaluate programs that have been conducted in the area of horticulture in the county.					
20. Relaying needs of the county people to the University for further research.					
21. Assisting in the development of the community and it's resources.					
22. Teaching the nutritional benefits derived from home gardens to the home gardener.					
23. Presenting programs on the nutritional benefits of home gardens to civic groups.					
24. Teaching the nutritional benefits of home gardens to low income families.					
25. Teaching the environmental benefits from the use of horticultural plant materials to the homeowner.					
26. The development of slide and script sets on horticulture for county agent use.					
27. Preparation and presentation of radio and television talks on horticulture.					
28. Preparation of informational sheets for use on radio and TV.					
29. Preparation and release of horticulture information to news media.					

THE ROLE OF THE AREA EXTENSION HORTICULTURAL SPECIALIST IN  
THE COOPERATIVE EXTENSION SERVICE OF KANSAS

by

SYLVESTER O. NYHART

B. S., Kansas State University, 1959

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AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Horticulture and Forestry

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1972

### Purpose and Procedure

The purpose of this study was to determine the role of the area horticultural subject-matter specialist in the Cooperative Extension Service.

The data gathering instrument was a structured mail questionnaire submitted to all Kansas County Extension Horticultural Agents and other such agents in states where such positions were identified, all area horticultural agents or specialists in other states, a random sample of state horticultural specialists, and a select group of state extension administrators from states with area horticultural positions or a large number of horticultural specialists. In addition to limited personal information about the respondent, the questionnaire consisted of twenty-three prelisted horticultural agents' functions. Respondents were asked to rate the importance of each function on a five point scale. The methods used in the analysis were mean weighted score and rank difference coefficient of correlation.

### Results

1. There was a greater amount of agreement between the respondents as they perceived the importance of the functions than was expected.
2. There was high agreement among the four respondent groups as to the rank order importance of the functions of the area horticultural agent.
3. There was fairly high agreement between the Kansas county and state extension horticultural personnel and the respondents

from other states on the rank order of importance of the area horticultural agents' functions.

4. Generally it can be concluded that the respondents feel the first six functions of the area horticultural agent can be ranked in the order listed below:
  1. Working with commercial horticultural producers, green-houses, nurseries, etc.
  2. Co-ordinating county programs among counties in the geographic area for which the area agent is responsible.
  3. Conducting educational programs through commercial horticultural producers, garden stores, nurserymen, etc.
  4. Preparing and releasing of horticultural information to news media.
  5. Preparing and presenting radio and television talks on horticulture.
  6. Relaying the needs of the county people to the University for further research.