

## Attitudes of County Extension Agents Toward Agent Specialization in Ohio

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Agent specialization in Ohio requires that county extension personnel direct up to 25 percent of their time in a specific subject matter area. Agents share expertise via presentations, serving on issues task forces, and developing written materials for use beyond county boundary lines (Ohio Cooperative Extension Service, Administrative Cabinet, 1989).

Agent specialization as a concept of providing expertise closer to program delivery, was introduced by the Minnesota Cooperative Extension Service as a way to improve the county agent's ability to work across county lines and across program lines. While the extension agent was still to be a resident community educator working with a broad range of county problems, he/she also would be expected to become specialized in a knowledge area (Hutchings, 1990).

In January 1991, agent specialization was implemented in Ohio. Agents were not expected to develop a subject matter specialty to the same level as state specialists, and specialization areas would be broad. Extension agents were asked to provide leadership and teach in their area of expertise inside and outside their county. Most agents were expected to maintain their broad areas of specialization over an expanded period. However, their areas of emphasis may change periodically. Specialization was designed to improve efficiency, since agents would not need to devote teaching preparation to all subject matter areas (Ohio Cooperative Extension Service, Administrative Cabinet, 1989). With a greater level of understanding in a specialty area, county personnel would be able to identify research needs and influence the research efforts of campus faculty (Godke, 1990).

### Purpose and Objectives

With specialization firmly in place, central extension administration further needed to know how agents felt about specialization. A study was authorized in 1993.

The purpose of the study was to determine the attitudes of county extension agents toward agent specialization. This study sought to determine the extent to which attitudes toward agent specialization were associated with major personal and organizational characteristics.

Secondly, relationships were explored among attitudes and the variables of importance, knowledge and ability to implement selected agent specialization competencies. The major objectives of this study were to:

Describe the agents with regard to selected personal characteristics including age, gender, marital status, years of experience, highest academic degree and major area of study.

Describe the agents with regard to selected organizational characteristics including position, extension program area, staffing pattern, extension district and specialization plan.

Determine the attitudes of county extension agents toward agent specialization.

Describe the perceptions of county extension agents about the importance, knowledge, and ability to perform selected agent specialization competencies.

Determine the perceptions of training needs of county extension agents regarding specific concepts of agent specialization.

Rank the training preferences of county extension agents.

Determine the extent to which attitudes toward specialization is associated with personal factors, including age, gender, marital status, length of service, highest academic degree, type of educational degree, organizational factors including position, county chair, extension program area, staffing pattern, extension district and specialization plan, and the perceived training needs of county extension agents, which include knowledge, and ability to perform specialization competencies.

### **Procedures**

Descriptive correlational research was employed in this study. This was accomplished through a mailed questionnaire, which was used to obtain the attitudes of county extension agents in Ohio toward agent specialization.

#### Population

The target population included all county agents who were participating in agent specialization in Ohio. To obtain the most accurate results possible, the total faculty (N=285) was utilized in gathering the information.

#### Instrumentation

A questionnaire was designed by the authors through a literature review for the purpose of collecting the necessary data from the agents. The instrument consisted of four sections. Section I contained 15 items, which were designed to collection information pertaining to the attitude of subjects toward agent specialization. In the first 12 items a four-point Likert-type scale was used, where subjects were instructed to circle the number which best represented their feelings related to a series of statements pertaining to agent specialization.

This section contained six negatively worded items, which were reverse coded in order to accurately reflect the attitudes of respondents. Three open-ended questions were included in this section in order to allow respondents to express the positive and negative aspects of agent specialization

in addition to recommendations for improving the system. Responses to the open-ended questions were summarized and analyzed by the researchers.

Part II had 14 items, where respondents rated selected agent specialization competencies based on the importance, knowledge and ability to implement. A four-point Likert-type scale was used in this section as well.

The Borish Model for Needs Assessment was used to collect, analyze, and report the data in this section (Borish, 1990).

Part III measured preferences of respondents regarding types of training for agent specialization. A ranking scale from 1-10 was provided, with 1 being the most preferred training and 10 being the least preferred. Two additional suggestions for types of training were also included. Questions on the personal and organizational characteristics of the respondents were in Part IV.

#### Validity/Reliability

Content validity of the instrument was determined by a panel of experts which consisted of extension administrators, selected graduate students and professors in the Department of Agricultural Education at The Ohio State University. The questionnaire, with appropriate revisions, was distributed in draft form to a sample of 25 county extension agents involved in specialization in the state of Minnesota for pilot testing.

Cronbach's alpha coefficients were calculated from the data collected in the pilot tests for the attitudinal scale and for the scales of perceived needs for training on importance, knowledge, and abilities, which were .75, .83, .84 and .80, respectively.

#### Data Collection

Questionnaires were mailed to all 285 members of the target population of county extension agents working under agent specialization. Appropriate follow-up contacts were made with those who had not responded. A total of 268 agents provided completed questionnaires representing a 94 percent rate of return. Two hundred and sixty-one questionnaires

or 91.6 percent were considered valid. According to Miller and Smith (1983), comparing early to late respondents is one way to estimate the nature of the replies of nonrespondents through late respondents, since research has shown that late respondents are often similar to nonrespondents. Late respondents were statistically compared to early respondents using the evaluation data to justify generalizing from the respondents to the sample. An alpha level of .05 was established a priori as the level of significance. The t-tests yielded no significant differences between the early and late respondents on the dependent variables selected for the study.

### Data Analysis

Descriptive statistics were used first to summarize and organize the data. A t-test was performed to see whether a difference between the means of two groups was significant. Analysis of variance was used to find out if there were significant differences between the means of more than two groups. Measures of association were utilized to determine the extent to which attitudes toward specialization were associated with personal factors, organizational factors, and training needs. Intercorrelations were used to determine the correlation of attitudes toward agent specialization and all variables included in the study.

Training needs were determined by calculating knowledge and ability to implement discrepancy scores for competency items in agent specialization.

## **Findings**

### Description of Agents Regarding Personal and Organizational Characteristics

The respondents had an average age of 38.61 years, 53.7 percent were female, the majority or 77.8 percent of the agents were married. Agents had a tenure ranging between 6 and 25 years, and the majority or 72.4 percent held a Master's degree, 44.4 percent held their highest degree in education, and 70.9 percent were noncounty chairs. Approximately 36 percent of the respondents spent the greatest amount of time in the 4-H extension program. The other program areas were agriculture (30%), home economics (26%) and community and natural resources development (5%). Conventional staffing (46%)

was the most prevalent county staffing pattern. Approximately one-fourth of the respondents (24.9%) belonged to the Southwest Extension District with 21.8 percent, 20.7 percent, 16.5 percent and 16.1 percent for the Northeast, Northwest, East and South Districts, respectively. About 73 percent of the county extension agents reported that they had a plan for specialization.

### Attitudes Toward Agent Specialization

Overall, attitude of county extension agents toward agent specialization was moderately positive. Part I of the instrument consisted of 12 Likert-type scale items to measure attitudes, with half of them negatively worked. The negatively coded items were reverse coded in order to obtain a consistent measure. The overall mean score for the attitudinal scale was 2.85, which implies that attitudes toward agent specialization were favorable among county extension agents in Ohio (Table 1) There were no significant relationships between attitudes toward agent specialization and personal and organizational characteristics in the population.

Table 1. Attitudes of County Extension Agents Toward Agent Specialization (n=268)

More positive and less positive attitudes	Mean
Clustering staffing pattern	3.12
Area of study of natural resources	3.12
26 and more years of experience	2.98
52 years old and older	2.97
Area of study of social sciences	2.96
Northwest District of Extension	2.96
"Other" extension program areas	2.65
21-25 years of experience	2.72
"Other" extension staffing pattern	2.73
Overall mean score	2.85

Scale: 1-1.5 = Low, 1.5-2.5 = Moderately Low, 2.5-3.5 = Moderately High, 3.5-4.0 = High.

Note: The last four items referred to the less positive attitude rated by the respondents.

Agents liked the following about agent specialization: specializing in an area of interest, getting more recognition, and access to more specialized training. Problems with agent specialization were time consuming, lack of local support, and need for more generalization. Suggestions for agent specialization were more guidelines and support, more coordination, and

more flexibility.

**Perceptions of Extensionists About the Importance, Knowledge, and Ability to Perform on Selected Agents Specialization Competencies**

Though selected agent specialization competencies were perceived as important, knowledge and ability to implement were not rated very high. Training needs identified included balancing agent specialization with other program responsibilities, making content meaningful, and acquiring in-depth subject matter skills.

**Relationships Between Dependent and Independent Variables**

A negligible association was found between the dependent variable (attitudes toward agent specialization) and the independent variables degree (eta=.03), position (r<sub>pb</sub>=.04), specialization plan (r<sub>pb</sub>=.02), age (r=-.02), years of experience (r=-.07), and ability to implement (r=.05).

Table 2. Correlation Between Independent Variables and Attitudes Toward Agent Specialization (n=268)

Independent Variable	Correlation with Attitude
Marital	eta = .15 <sup>a</sup>
Study	eta = .15 <sup>a</sup>
Degree	eta = .03 <sup>a</sup>
Program	eta = .15 <sup>a</sup>
Pattern	eta = .19 <sup>a</sup>
District	r <sub>pb</sub> = .19 <sup>b</sup>
Position	r <sub>pb</sub> = -.04 <sup>b</sup>
Gender	r <sub>pb</sub> = .02 <sup>b</sup>
Specialization plan	r <sub>pb</sub> = -.10 <sup>b</sup>
Age	r = -.02 <sup>c</sup>
Years of experience	r = -.07 <sup>c</sup>
Knowledge	r = .10 <sup>c</sup>
Ability	r = .05 <sup>c</sup>

<sup>a</sup>Denotes interval vs. nominal with more than two levels.

<sup>b</sup>Denotes interval vs. nominal-dichotomous.

<sup>c</sup>Denotes interval vs. interval.

Low correlations were found between the dependent variable (attitude toward agent specialization) and the independent variables:

marital (eta=.15), study (eta=.15), program (eta=.15), pattern (eta=.19), district (r<sub>pb</sub>=.19), specialization plan (r<sub>pb</sub>=.10), and knowledge (r=.10) (Table 2).

**Ranking of Training Preferences**

Table 3 presents the ranking of training preferences of county extension agents. For ranking considerations, the means were coded in ascending order and ranged from 1 to 10. Overall, the most preferred type of training for the respondents was state-wide conference, with a mean of 3.66. District conference was the second most preferred type of training with a mean of 4.04, followed by formal classes, working with a district specialists and video cassette, with means of 4.27, 4.76 and 4.82 respectively. Audio cassette and telephone conference calls were the least preferred type of training, with a mean of 7.52.

Table 3. Ranking of the Training Preferences of County Extension Agents for Agent Specialization

Ranking	Type of training	Mean	SD
1	Statewide conference	3.66	2.50
2	District conference	4.04	2.50
3	Formal classes	4.27	2.58
4	Working with a state specialist	4.76	3.19
5	Video cassette	4.82	2.50
6	Internships with a state specialist	5.56	3.19
7	Satellite	6.01	2.58
8	Letter studies	6.62	2.33
9	Audio cassette	7.52	2.35
10	Telephone conference call	7.52	2.38

Ranking 1 = most preferred

Ranking 10 = least preferred

**Conclusions and Recommendations**

Overall, agents were moderately satisfied with agent specialization. This finding supports the opinion of Fitzsimmons (1989), who visualized the extension local specialization scenario as very feasible. County extension agents preferred to receive training through statewide conferences, district conferences, and formal classes. The competence areas in which agents needs were the greatest were balancing agent specialization with



other program responsibilities, insuring meaningful content, and providing in-depth subject matter skills.

A longitudinal study should be developed to examine the degree to which agent specialization is implemented in Ohio and other states that have similar agent specialization efforts. In agent specialization, training in general areas needs to be expanded so a well balanced program is not neglected. The number of county extension agents working under the clustered staffing pattern of clustering needs to be increased. University professors should be encouraged to work on research in coordination with agents at the county level. The possibility of joint publications among specialized agents, district specialists, state specialists, and on-campus based faculty should be promoted. Increased support in terms of guidelines, criteria for specialization and funding should be provided by the district and state level.

Further research is needed to investigate the effectiveness of agent specialization under different staffing patterns and areas of specialization. The study should be replicated in other states where agent specialization is in a similar stage after minor revisions are made in the instrument. Other states could benefit from the present study in addition to examining agent specialization under different conditions. A similar study should be conducted in other states where agent specialization is under consideration. This would enable county extension agents and extension administrators to plan for change rather than adjust for change. A need to study the attitudes of extension audiences toward agent specialization is critical. A study that addresses the attitudes of district specialists, state specialists and on-campus faculty regarding agent specialization needs to be considered. A qualitative aspect such as a focus group interview (FGI) should be added to the study. The focus group interview is a very suitable method for uncovering information about human perceptions, feelings, opinions and thoughts. Questions regarding new programs and proposals can be investigated fast and relatively cheap (Krueger, 1988).

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