

Self-Perceived Orientation Training Needs of Extension Professionals in Iowa

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One of the important problems facing Cooperative Extension is how to determine orientation and in-service training needs of new extension professionals (Hilliker, 1982). Orienting new people is a concern for education, business, and government, and training has become imperative for increasing the effectiveness of organizations (Mayo & DuBois, 1987). In extension, staff development is essential because the success of educational programs depends heavily upon the abilities of individual professionals (Prawl et al., 1984).

Congressional amendments to the 1914 Smith-Lever Act have broadened the legally assigned responsibilities of Cooperative Extension. Today, Cooperative Extension is characterized by a multiplicity of programs, program objectives, and educational methods, and by a diversity of clientele groups and issues.

Today's challenge for extension is an expanded educational effort to effectively relate the total expertise and resources of institutions of higher education to the solution of complex problems of individuals and the society in general. This challenge creates a continuous need for staff development for extension professionals. (ECOP, 1977)

Numerous studies have been conducted on extension training needs, both for orientation and in-service (Waziri, 1985; Brooks, 1982; Jahi & Newcomb, 1981). Additional research was needed due to new developments in technology, programming concepts, and new national extension staff development materials (Boone, 1988). The new national materials, "Working with Our Publics," were developed under the auspices of the Extension Committee on Organization and Policy (ECOP) and were used for the first time in 1988. A needs assessment was needed to determine which parts of the new national materials would be most useful in new staff orientation.

Adult learning theory emphasizes the importance of using needs of clientele as a basis for training programs. Lacking clientele information, educators often impose their own values and perceptions of need. It is crucial to make decisions based on data produced by needs assessment to effectively meet needs of learners in an educational setting (Price, 1983).

Given the importance of orientation training for improving extension programs and the availability of new national staff development materials (Boone, 1988), it was necessary to analyze training situations and needs in order to make recommendations for on-campus orientation sessions. Questions raised included the following: What training was needed? What topics should be included in on-campus orientations? Were there differences in importance of these topics when personal characteristics were considered? Changes had occurred in methodology, subject content, and materials available for orientation programs. Data assessing the suitability of these changes for Iowa were lacking.

Purpose and Objectives

The purpose of the study was to assess orientation needs as perceived by new extension personnel. The study objectives were to:

Identify topics that needed to be addressed during orientation of extension personnel.

Determine the relationships among selected characteristics of extension personnel and perceived importance and need for training on various topics.

Evaluate the on-campus orientation sessions.

Determine preferred methods for delivering orientation.

Methods and Procedures

The population included all new professionals in the Iowa Cooperative Extension Service who had been hired during 1984-1988. The study was limited to this group because of its size and the likelihood that newer staff would remember their orientation training. A descriptive design that included a needs assessment was selected in order to gain new insights into the perceived needs of the conceptual population, that being future newly employed Iowa extension professionals. The needs assessment in the study was a "point in time" assessment that could be generalized to a future population because the referent population was appropriate to the substantive question posed (Minium, 1978). Asking Extension professionals to identify topics for future orientation training was consistent with the conclusions of Sofranko & Khan (1988). They questioned the ability of inexperienced people to express their needs. Rockwell and Kohn (1989) asserted that participants could more accurately assess their behavior at the end of a program rather than the beginning because they had limited knowledge about a program at the beginning.

An extensive literature review that included agendas of previous orientations was used to identify instrument items. The survey instrument was adapted from questionnaires used in similar studies (Jahi & Newcomb, 1981; Hilliker, 1982; Waziri, 1985). A content validity check was done with appropriate administrators and personnel of the Iowa State University Extension Service as well as with graduate students and faculty in the Agricultural Education and Studies Department at Iowa State University. The first part of the instrument contained two five-point numeric scales; one measuring the level of need for the orientation item before attending the orientation and the other measuring the level of importance of the same item. The second section of the questionnaire included questions about preferred methods of obtaining information while the third section enabled respondents to rate their satisfaction with the orientation session they had attended. Cronbach's Alpha coefficients were computed to determine reliability for the importance scale (.83), the need scale (.89), and the satisfaction scale (.94).

Data Collection

One-hundred and twenty questionnaires were mailed during June and July, 1989, and 97 were returned. Nine responses were not used because they had more than five years experience with the Extension organization, leaving 88 questionnaires for the analyses (79%). Early respondents were compared with late respondents on 20% of the variables, randomly selected. A t-test indicated no significant differences between the early and late respondents. The results were generalizable to the population (Miller and Smith, 1983).

Data Analysis

Descriptive statistics included frequencies, means, percentages, and standard deviations. Spearman's correlation coefficient (ρ) was used to disclose the degree of agreement among respondents in rankings of orientation training items and the relationships between characteristics of respondents and their perceived orientation needs. Mean scores were calculated for each item and then ranked by the researcher from high to low. Translating scored measures into rank form is appropriate, especially when numbers of pairs are small (Minium, 1978).

Findings/Discussion

Table 1 displays the twenty-four orientation items according to training needed and importance. All items had mean values of 3.1 or higher with 50% of the items having means of 4.1 or higher, indicating that all of the identified training needs were important. Under training needed, meeting and identifying roles of staff, managing time and resources, and motivating clients had the highest means. When importance was considered, items with the highest means were interpersonal communication, managing time and resources, and selecting teaching methods. Preparing budgets was the item with the lowest mean, possibly because budget responsibilities were unlikely to be delegated to new staff. The needs as identified in Iowa in 1989 were different from the needs identified by Jahi & Newcomb in 1980 in the Midwest, which indicated that the content of the orientation in each state should be revised periodically and/or tailored appropriately. The Spearman correlation coefficient, ρ , was 0.74, which indicated a moderate degree of agreement between need and importance for the population studied (Hinkle et al., 1979).

Table 1. Rank Order of 24 Orientation Items According to Training Needed and importance

Orientation training area	Amount of <u>training needed</u>			<u>Importance</u>		
	Rank	Mean	SD	Rank	Mean	SD
Meet state, area and county staff and identify their roles	1	4.0	1.1	5	4.5	0.7
Manage time and resources	2	3.8	1.1	2	4.6	0.7
Motivate clients	3	3.7	1.2	4	4.5	0.7
Involve committee/volunteers in carrying out and evaluating programs	4	3.6	1.1	13	3.9	1.0
Use appropriate methods to evaluate programs	5	3.6	1.0	11	4.1	0.8
Explain inter-agency cooperation	6	3.6	1.0	12	4.1	0.9
Prepare newsletter, brochure and news articles	7	3.6	1.2	8	4.2	1.0
Identify factors affecting behavior of the people	8	3.6	1.1	7	4.4	0.7
Use interpersonal communication	9	3.6	1.2	1	4.6	0.6
Use computers	10	3.5	1.2	16	3.9	1.0
Complete reports and paperwork	11	3.5	1.1	17	3.6	1.1

^aScale: 1=low, 5=high; Spearman correlation coefficient $\rho=0.74$.

Note: Mean scores were rounded to the nearest tenth for brevity in reporting.

Table 1 continued.

Orientation training area	Amount of training needed			Importance		
	Rank	Mean	SD	Rank	Mean	SD
Use the major steps in the extension program development process	12	3.5	1.1	13	3.9	0.9
Select appropriate teaching methods and techniques for each situation	13	3.4	1.2	3	4.6	0.7
Understand myself	13	3.4	1.4	9	4.2	1.0
Develop radio and TV programs	15	3.4	1.2	15	3.7	1.2
Use principles of teaching adults in program delivery	16	3.4	1.1	6	4.4	0.9
Select and develop instructional materials	17	3.3	1.2	10	4.2	0.9
Follow Affirmative Action and civil right guidelines	18	3.3	1.1	18	3.6	1.1
Define relationship of extension to the Land Grant Colleges, USDA and county councils	19	3.3	1.1	21	3.5	1.0
Prepare slides and transparencies	20	3.2	1.2	22	3.5	1.1
Use satellite and video	21	3.2	1.2	20	3.6	1.1
Describe history and mission of the Extension Service	22	3.2	1.1	23	3.4	1.3
Select and supervise aids and staff	23	3.1	1.3	19	3.6	1.0
Prepare budget	24	3.1	1.2	24	3.1	1.3

Gender was one of the characteristics of respondents that was studied in relation to the perceived training needed and the importance of orientation items. The degree of agreement on ranking of needs by male and female respondents was $r_{ho} = 0.31$, which is considered very low (Hinkle et al., 1979). On the importance scale, the degree of agreement between males and females was $r_{ho} = 0.83$, which is considered high (Hinkle et al., 1979). The finding on needs did not substantiate that of Jahi & Newcomb (1981) who found that males and females had similar ratings for both needs and importance.

The three most highly ranked items on training needs by males were manage time and resources, meet staff, and use interpersonal communication (Table 2). Females ranked most highly meeting staff, involving volunteers and using computers.

When respondents evaluated the on-campus, two- to three-day, orientation they had attended, means ranged from 3.13 to 3.70 on a five-point satisfaction scale ranging from 1 (not satisfied) to 5 (highly satisfied). Out of eighteen orientation training items, the Extension professionals preferred to obtain information on thirteen of the items from sources/methods other than the on-campus orientation program. Possible other sources/methods cited were on-the-job experience, independent studies, interviews, credit courses, and training by satellite.

Table 2. Rank Order of Perceived Amount of Training Needed of 24 Orientation Items by Gender^a

Training item	Male		Female	
	Rank	Mean	Rank	Mean
Manage time and resources	1	4.0	7	3.7
Meet state, area and county staff and identify their roles	2	3.9	1	4.1
Use interpersonal communication	3	3.8	14	3.4
Motivate clients	4	3.8	5	3.7
Understand self	5	3.7	18	3.3
Identify factors affecting behavior of the people	6	3.7	11	3.5
Prepare newsletter, brochure and news articles	7	3.6	9	3.6
Use principles of teaching adults in program delivery	7	3.6	19	3.2
Explain inter-agency cooperation	9	3.6	10	3.5
Select appropriate teaching methods and techniques for each situation	10	3.5	13	3.4
Use appropriate methods to evaluate programs	11	3.5	4	3.7
Develop radio and TV programs	12	3.4	16	3.3
Define relationship of extension to the Land Grant Colleges, USDA, and county councils	13	3.4	21	3.2
Involve committee/volunteers in carrying out and evaluating programs	14	3.4	2	3.8
Prepare slides and transparencies	15	3.3	22	3.1
Use computers	16	3.3	3	3.8
Select and develop instructional materials	16	3.3	15	3.3
Describe history and mission of the Extension Service	16	3.3	23	3.1
Prepare budget	19	3.3	24	3.0
Complete reports and paperwork	20	3.2	6	3.7
Use the major steps in the extension program development process	20	3.2	8	3.6
Follow Affirmative Action and civil rights guidelines	22	3.1	12	3.5
Select and supervise aides and staff	23	3.1	20	3.2
Use satellite and video	24	3.0	16	3.3

^aScale: 1=low, 5=high; Spearman correlation coefficient $\rho=0.31$.

Note: Mean scores were rounded to the nearest tenth for brevity in reporting

Summary/Conclusions

Because orientation training items in the areas of human behavior and program development and evaluation were highly rated, training is needed in these areas. Topics that should be included are meeting staff, time management, motivation, and teaching methods.

Means were higher and standard deviations were larger for importance items than for needs items, indicating that individualized training would be appropriate.

Males and females generally agreed on their rankings of importance, a finding similar to that of Jahi and Newcomb (1981). The dissimilar rankings by males and females of needs did not support the Jahi and Newcomb study (1981).

Respondents preferred a variety of sources and methods for orientation training rather than an on-campus formal orientation session.

Recommendations

The following recommendations were made, based on the findings of this study.

Orientation for new extension professionals in Iowa should emphasize meeting county, area, and state staff; time and resource management; motivation of clientele; and teaching methods.

The content of the twenty-four items in this study should be compared with the content of the new staff development materials (Boone, 1988) in determining the content of future orientation programs.

A more individualized orientation should be considered.

The on-campus, two- to three-day orientation program should be revised. Extension administrators should seriously consider other sources/methods available to provide information on orientation items and on topics to new extension professionals. Other delivery methods that might be considered are interaction with specialists and individualized offerings of independent studies.

The following recommendations were based on the literature review:

Currently employed professionals should be used to identify appropriate orientation topics for future employees.

Nationwide, extension professionals should be involved in the identification of their training needs. Since coordinators of orientation programs are important in planning agendas, their perceptions of orientation needs should be assessed. A comparison of perceptions of needs, as identified by participants and coordinators, would be useful in planning a comprehensive staff development program.

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