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## Reaching the Rural Audience

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## Reaching the Rural Audience


#### Abstract

Measuring radio's effectiveness at reaching rural audiences has been the subject of hundreds of studies over the past 50 years.


## Reaching the Rural Audience

## Frank J. Mangan

Measuring radio's effectiveness at reaching rural audiences has been the subject of hundreds of studies over the past 50 years. In the early 50's there was concern that radio's impact would be greatly diminished by television and for some program material this proved to be the case. The use of radio by the Agricultural Extension Service continued to expand, however, though program format has changed with the times. In 1973, a survey in West Virginia indicated that more than 70 percent of the state's extension offices had a regularly scheduled radio program on the air with program length varying from 5 to 30 minutes. ${ }^{1}$ Spot programming was used more than any other type. The trend has been toward shorter, more compact features as opposed to longer programs. Ray Wolf, radio specialist for 29 years for the University of Minnesota said that in 1948 typical radio interviews ran from 12 to 15 minutes, but that today five minutes is considered almost too long. ${ }^{2}$

## Concerns over Effectiveness

There has been some dissenting opinion on radio's effectiveness. In 1972, a Wisconsin study showed that 52 percent of farmers surveyed regarded radio as an important source of information ${ }^{3}$, however, a study in 1952 indicated that extension agents must be sold the value of radio. In terms of time and money expended, county agents in Ohio, Virginia, and Pennsylvania felt that they had better results with newspaper columns and $2 \times 2$ color slides in disseminating information before using radio. ${ }^{4}$ In the same year, however, a north central radio

[^0]survey of nine states revealed that a high percentage of agents felt that radio is a valuable method for education. This opinion was expressed by 93 percent of a survey population of $2,300 .{ }^{5}$ A survey conducted in 1949 by Kansas State College indicated that farm radio programs had more listeners during winter months than at any other time of year; the survey also established a correlation between those who listened to farm and home radio programs and those attending extension meetings. ${ }^{6}$

## Strong Role in Creating Interest/Awareness

There has been strong survey evidence for the contention that radio plays a significant role in creating interest and awareness in extension activities. A study by George Saksa in 1966 concluded that those who listen to the extension programs are more apt to call or visit the extension office, obtain bulletins, and attend more extension meetings than the nonlistener. ${ }^{7}$ A radio listening anslysis conducted 20 years earlier also reflected this conclusion when 38 percent of 223 farm families responded that they contacted county agents offices as a result of listening to extension programming. ${ }^{8}$

A national study has shown that 5:30-7:30 and 11:30-1:00 are the farmers' favored listening periods. ${ }^{9}$ An Illinois study indicated that 73 percent of its survey population listened to local stations for farm news and had an average of 5.94 radios per farm. ${ }^{10}$ Radio station WAVN in Stillwater, Minnesota, questioned an audience for daily news sources and reported the following results:

|  | Radio | TV | Newspaper | Magazine ${ }^{11}$ |
| :--- | :---: | :---: | :---: | :---: |
| Early Morning | $70 \%$ | $9 \%$ | $21 \%$ | - |
| Late Morning | $69 \%$ | $16 \%$ | $14 \%$ | $1 \%$ |
| Noon to Six | $46 \%$ | $28 \%$ | $13 \%$ | $2 \%$ |
| Six to Midnight | $15 \%$ | $72 \%$ | $12 \%$ | $1 \%$ |

Note: Though the above survey was conducted for its own advertising purposes, the data does lend support to "prime" radio time statistics.

These statistics support the prime "drive" time for rural audiences cited in the national study, so it could be concluded that radio spots in the time frames mentioned can reach a
large audience in a short time, be cost effective, can move people to action (contact with county office and county meetings), and will allow the public to maintain a continuing awareness of agent activities, particularly if programming is regularly scheduled.

## Survey Project to Determine Extent of Radio Use

This study was conducted to determine the extent of radio use for educational programming by Minnesota County Extension Agents. As in any survey research project it was important, too, for myself and co-investigator, Larry Karels, to define what we wanted to find out and why.

These questions were developed into problem statements:

- What radio stations are currently in use for extension programming?
- How many agents utilize radio and what factors contribute to the frequency of usage?
- What resources are utilized for program material and to what extent?
- What methods of delivery are commonly used by agents for radio broadcasting?
- Are there any areas of concern reflected by the results that can be addressed by inservice staff development?

The questions were devised to indicate agents' frequency of radio use, and the factors that influenced agents' attitudes and opinions toward this medium as an educational tool for extension programming. In order to measure the extent of radio utilization we constructed sets of Likert intensity scales that would yield interval measures of the following variables:

- agent attitude toward radio utilization
- resources for radio program content
- radio program delivery methods

The instrument of 22 questions was composed of both openended, matrix, and contingency questions. The specific population of the study consisted of 246 subjects comprising the total staff of Minnesota's county extension agents as of June 10, 1981. A total of 185 questionaires were returned reflecting a return rate of 75 percent.

## Discussion of Results

"Do you use radio in your capacity as an extension educator?", was answered in the affirmative by 86 percent of the respondents. Of the agents who do not utilize radio, the reasons given generally indicated inaccessibility of radio stations either by distance or in equipment compatibility. The survey questioned program length, number of days aired, and time of day broadcast. Seventy-five percent of the respondents indicated that they were not aware of any survey of their listening audience. The types of organizations that purchased air

| Table 1 Demographic Variables |  |  |  |
| :---: | :---: | :---: | :---: |
| Variables | Level | Number | Percentage |
| Sex | Male | 89 | 50.3\% |
|  | Female | 88 | 49.7\% |
| Age | 25 \& below | 20 | 11.3\% |
|  | 26-35 | 84 | 47.5\% |
|  | 36-45 | 29 | 16.4\% |
|  | 46-55 | 32 | 18.1\% |
|  | 56 and above | 12 | 6.8\% |
| Years of | 5 yrs or less | 79 | 44.4\% |
| Employment | $6-10 \mathrm{yrs}$. | 34 | 19.1\% |
|  | 11.15 yrs. | 17 | 9.6\% |
|  | $16-20$ yrs. | 15 | 8.4\% |
|  | 21 and above | 33 | 18.5\% |
| Job | Ag | 62 | 34.8\% |
| Description | Home Ec | 66 | 37.1\% |
| County Agent | 4H \& Youth | 42 | 23.6\% |
|  | Director | 4 | 2.2\% |
|  | Other | 4 | 2.2\% |
| Degree | BA | 30 | 16.9\% |
|  | MA | 13 | 7.3\% |
|  | PHD | 1 | .6\% |
|  | BS | 113 | 63.5\% |
|  | MS | 15 | 8.4\% |
|  | Master of Ag. | 6 | 3.4\% |
| County | under 10,000 | 18 | 10.1\% |
| Population | 10-24,999 | 74 | 41.6\% |
|  | 25-49,999 | 53 | 29.8\% |
|  | 50-100,000 | 16 | 9.0\% |
| / newprairiepress.org/jac/vol66/P352/5 100,000 |  | 17. | 9.6\% |

time preceding or following agent broadcasts represent a variety of local and agribusiness concerns.

The questionnaire then focused on four areas: demographics, sources consulted by agents for program material, methods of broadcasting, and a series of attitude statements.

The demographic breakdown, Table 1, shows a nearly equal male/female survey population. The majority ( 64 percent) of the agents are between the ages of $26-45$. The years of employment with the extension service were determined and a breakdown by primary job description was arrived at. The range of college degrees held and the county population distribution was determined. These statistics were tested against the three major question categories mentioned earlier to determine for any significant correlations. Tables 2 thru 19 comprise these tabulations. Any statistical correlations between a demographic variable and a corresponding question are noted at the bottom of each table. Tables A, B, and C reflect the ranges of responses for all respondents.

## Table A. <br> (Percentages reflect sources used usually and always)

Sources
Weekly news packet
from University . . . . . . . . . . . . . . $27.5 \%$

Reference materials . . . . . . . . . . . $33.4 \%$
Personal expertise ............. 41.4\%
Requests from specialists ....... 12.9\%
Local activities . . . . . . . . . . . . . . . 44.7\%
State activities . . . . . . . . . . . . . . . . 13.9\%
County clientele .................. 10.2\%
Personal interviews . . . . . . . . . . . . . 5.9\%
Telephone interviews . . . . . . . . . . 4.3\%
Yard and Garden . . . . . . . . . . . . . 19.9\%
Farm Publications . . . . . . . . . . . . . . 7.6\%
Specialist newsletters . . . . . . . . . . 23.6\%
Newsline . . . . . . . . . . . . . . . . . . . . 8.6\%

Table B.
(Percentage indicates methods used usually and always)

Method of delivery All Respondents
Agent tape sent to station. . . . . . . . . . . 42\%
University tape sent by agent to station 3.7\%

Live broadcast by agent at station 23.2\%

Delayed broadcast at station 14\%

Written materials sent to
station by agent
23.6\%
Live broadcast via
telephone . . . . . . . . . . . . . . . . . . . 16.7\%

Delayed broadcast via telephone
9.2\%

Table A shows a percentage of those respondents who indicated that they utilize a listed source either always or usually for program preparation. Respondents had a range of choices among always, usually, sometimes, rarely or never. The always and usually responses were totaled and an overall percentage was arrived at. This percentage reflects the intensity of source use for each individual item, and also for all

Journal of A pplied Communications, Vol. 66, Iss. 2 [1983], Art. 5
items comparatively. For example, Table A shows that 41 percent usually or always rely on personal expertise for program sources. This may have been a foregone conclusion, but almost 45 percent indicated local activities to be a prime source for program material which provides more relevant comparative data.

Table B reflects the percentages of delivery methods used usually and always by agents. The choices were always, usually, sometimes, rarely, and never. A comparatively high 42 percent sent prepared tapes to radio stations.

Table C reflects the calculated percentages of those agents who circled strongly agree and agree with the corresponding attitude statement. The range of choices were strongly agree, no comment, disagree, and strongly disagree. The range of responses indicated that 76 percent of the agents felt that the station supplied adequate air time, though agents reflected less confidence that they had a strong following, i.e., 47.9 percent. A strong need for short news items for program preparation was shown, 74.2 percent, and 38 percent felt more training would bring about greater use. This is further supported by the open ended responses to staff development needs.

## Correlations

As mentioned earlier, Tables 2 through 19 reflect crosstabulations between demographic variables and individual questions. Table 2 reflects some obvious correlations. Males,

| Table C. <br> (Percentage indicates agent strongly agreeing and agreeing with attitude statement.) | I have a good rapport with the stations I utilize. $\qquad$ 84.4\% <br> I would like assistance from |
| :---: | :---: |
| Attitude Statement All Respondents | specialists for program material. .24.2\% |
| The station is giving me adequate air time 76.4\% | County office should receive copies of material sent by |
| I have a strong following for my programming 47.9\% | U. to station. . . . . . . . . . . . . . . . . . . $64.5 \%$ <br> I would like more short |
| My program is aired at poor listening times . . . . . . . . . . . . . . . . . 10.8\% | news items for radio. . . . . . . . . . . . $74.2 \%$ I find the weekly info. supplied |
| I have enough time to prepare my radio programs. . . . . . . . . . . . . $50.5 \%$ | by Ext. Info. and Ag. Jo. <br> Dept. to be helpful. . . . . . . . . . . . . $65.1 \%$ |
| Radio programming is an effective means for extension education. . . . . . . . . . . .91.4\% | I would frequently use <br> U. education tapes. . . . . . . . . . . . .24.2\% <br> I would make greater use of |
| Rapport with station is | radio programming if I had |
|  | more training. . . . . . . . . . . . . . . . . $38.2 \%$ |
| DOI:10.4148/1051-0834.1725 20 | 6 |

Table 2
Percentages reflect sources used usually and always (By sex)

| Sources | Male | Female |
| :--- | ---: | ---: |
| Weekly news packet |  |  |
| from University | $25 \%$ | $31 \%$ |
| Reference materials | $30 \%$ | $39 \%$ |
| Personal expertise | $52 \%$ | $34 \%$ |
| Requests from specialists | $12 \%$ | $15 \%$ |
| Local activities | $51 \%$ | $40 \%$ |
| State activities | $11 \%$ | $18 \%$ |
| County clientele | $11 \%$ | $10 \%$ |
| Personal interviews | $9 \%$ | $3 \%$ |
| Telephone interviews | $8 \%$ | $1 \%$ |
| Yard and Garden | $32 \%$ | $8 \%$ |
| Farm Publications | $13 \%$ | $2 \%$ |
| Specialist newsletters | $27 \%$ | $21 \%$ |
| Newsline | $11 \%$ | $7 \%$ |

Statistical significance was shown for the following sources at the .05 level: Telephone interviewing; Yard and Garden; Farm Publications.
the majority being agricultural agents, make greater use of "Yard and Garden" and farm publications for program sources. A less obvious correlation is a greater use of telephone interviewing.

Table 8 indicates that a majority of male agents sent prepared tapes to stations, while female agents indicated regular use of live telephone broadcasts at the radio station. It can be concluded that these correlations may well be a function of occupation and this is supported in Table 11 which indicates that 30 percent of the Home Economic agents conduct live broadcasts at the station as opposed to only 16 percent of the Ag agents.

Local activities provided to be the major source of materials for programs. The weekly news packet from the University (27.5 percent), specialist newsletters (23.6 percent), reference materials ( 33.4 percent), and Yard and Garden were regularly used.

The cross-tabulation with sex was referred to earlier; however, age, degree, and county population had little influence on source selection. Agents with more than 16 years of employment rely more strongly on telephone interviewing, Yard and Garden, and farm publications.

Table 3
Percentages reflect sources used usually and always (By age)

| Sources | $\mathbf{2 5}$ and <br> below | $\mathbf{2 6 - 3 5}$ | $\mathbf{3 6 - 4 5}$ | $\mathbf{4 6 - 5 5}$ | $\mathbf{5 6}$ and <br> above |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Weekly news packet |  |  |  |  |  |
| $\quad$ from University | $10 \%$ | $26 \%$ | $31 \%$ | $46 \%$ | $17 \%$ |
| Reference materials | $30 \%$ | $36 \%$ | $31 \%$ | $42 \%$ | $17 \%$ |
| Personal expertise | $35 \%$ | $36 \%$ | $32 \%$ | $55 \%$ | $50 \%$ |
| Requests from specialists | $5 \%$ | $11 \%$ | $24 \%$ | $18 \%$ | $8 \%$ |
| Local activities | $60 \%$ | $46 \%$ | $35 \%$ | $46 \%$ | $42 \%$ |
| State activities | $15 \%$ | $20 \%$ | $7 \%$ | $12 \%$ | $0 \%$ |
| County clientele | $5 \%$ | $10 \%$ | $7 \%$ | $15 \%$ | $25 \%$ |
| Personal interviews | $10 \%$ | $6 \%$ | $7 \%$ | $3 \%$ | $8 \%$ |
| Telephone interviews | $5 \%$ | $1 \%$ | $0 \%$ | $15 \%$ | $8 \%$ |
| Yard and Garden | $5 \%$ | $8 \%$ | $38 \%$ | $46 \%$ | $17 \%$ |
| Farm Publications | $5 \%$ | $1 \%$ | $10 \%$ | $15 \%$ | $13 \%$ |
| Specialist newsletters | $15 \%$ | $19 \%$ | $34 \%$ | $33 \%$ | $25 \%$ |
| Newsline | $0 \%$ | $2 \%$ | $0 \%$ | $9 \%$ | $8 \%$ |

## Table 4 <br> Percentages reflect sources used usually and always (By years of employment)

| Sources | 5 or <br> less | $\mathbf{6 - 1 0}$ | $\mathbf{1 1 - 1 5}$ | $\mathbf{1 6 - 2 0}$ | $\mathbf{2 1}$ and <br> above |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Weekly news packet |  |  |  |  |  |
| from University | $22 \%$ | $32 \%$ | $29 \%$ | $47 \%$ | $29 \%$ |
| Reference materials | $30 \%$ | $32 \%$ | $29 \%$ | $28 \%$ | $50 \%$ |
| Personal expertise | $33 \%$ | $47 \%$ | $30 \%$ | $47 \%$ | $65 \%$ |
| Requests from specialists | $13 \%$ | $6 \%$ | $24 \%$ | $20 \%$ | $15 \%$ |
| Local activities | $51 \%$ | $38 \%$ | $39 \%$ | $47 \%$ | $47 \%$ |
| State activities | $18 \%$ | $15 \%$ | $12 \%$ | $7 \%$ | $12 \%$ |
| County clientele | $9 \%$ | $12 \%$ | $6 \%$ | $7 \%$ | $18 \%$ |
| Personal interviews | $8 \%$ | $3 \%$ | $6 \%$ | $0 \%$ | $9 \%$ |
| Telephone interviews | $3 \%$ | $0 \%$ | $0 \%$ | $13 \%$ | $12 \%$ |
| Yard and Garden | $11 \%$ | $18 \%$ | $24 \%$ | $33 \%$ | $35 \%$ |
| Farm Publications | $5 \%$ | $0 \%$ | $0 \%$ | $7 \%$ | $27 \%$ |
| Specialist newsletters | $19 \%$ | $15 \%$ | $24 \%$ | $53 \%$ | $32 \%$ |
| Newsline | $1 \%$ | $0 \%$ | $6 \%$ | $0 \%$ | $12 \%$ |

Statistical significance was shown for the following sources at the .05 level:
Telephone interviewing; Yard and Garden; Farm Publications.

|  | County Agent |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Sources | Ag | Home Ec | 4H \& Youth | Director | Other |
| ** Weekly news packet | $32 \%$ | $36 \%$ | $12 \%$ | $25 \%$ | $0 \%$ |
| Reference materials | $38 \%$ | $42 \%$ | $17 \%$ | $25 \%$ | $25 \%$ |
| Personal expertise | $60 \%$ | $26 \%$ | $45 \%$ | $25 \%$ | $25 \%$ |
| Requests from specialists | $13 \%$ | $18 \%$ | $10 \%$ | $0 \%$ | $0 \%$ |
| ** Local activities | $51 \%$ | $32 \%$ | $64 \%$ | $0 \%$ | $25 \%$ |
| * State activities | $8 \%$ | $12 \%$ | $31 \%$ | $0 \%$ | $0 \%$ |
| County clientele | $11 \%$ | $9 \%$ | $12 \%$ | $25 \%$ | $0 \%$ |
| ** Personal interviews | $6 \%$ | $3 \%$ | $12 \%$ | $0 \%$ | $0 \%$ |
| Telephone interviews | $10 \%$ | $2 \%$ | $2 \%$ | $0 \%$ | $0 \%$ |
| ** Yard and Garden | $43 \%$ | $3 \%$ | $5 \%$ | $25 \%$ | $0 \%$ |
| * Farm Publications | $16 \%$ | $0 \%$ | $5 \%$ | $25 \%$ | $25 \%$ |
| * * Specialist newsletters | $38 \%$ | $23 \%$ | $7 \%$ | $25 \%$ | $25 \%$ |
| Newsline | $6 \%$ | $3 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |

Number of agents per
job category: $\quad 63 \quad 66 \quad 42 \quad 4$
**Statistical significance was shown for the following sources at the .05 level: Weekly newspacket; Local activities; State Activities; Personal interviews; Yard and Garden; Farm publications; Specialists newsletters.

## Table 6 <br> Percentages reflect sources used usually and always (By degree)

| Sources | BA | MA | PHD | BS | MS | Master/Ag. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Weekly news packet |  |  |  |  |  |  |
| $\quad$from University | $23 \%$ | $21 \%$ | $100 \%$ | $28 \%$ | $40 \%$ | $17 \%$ |
| Reference materials | $40 \%$ | $29 \%$ | $100 \%$ | $31 \%$ | $53 \%$ | $17 \%$ |
| Personal expertise | $47 \%$ | $57 \%$ | $0 \%$ | $39 \%$ | $40 \%$ | $68 \%$ |
| Requests from specialists | $13 \%$ | $36 \%$ | $0 \%$ | $12 \%$ | $13 \%$ | $0 \%$ |
| Local activities | $40 \%$ | $64 \%$ | $100 \%$ | $45 \%$ | $40 \%$ | $33 \%$ |
| State activities | $13 \%$ | $0 \%$ | $100 \%$ | $23 \%$ | $13 \%$ | $33 \%$ |
| County clientele | $0 \%$ | $29 \%$ | $0 \%$ | $12 \%$ | $13 \%$ | $0 \%$ |
| Personal interviews | $0 \%$ | $7 \%$ | $0 \%$ | $5 \%$ | $20 \%$ | $17 \%$ |
| Telephone interviews | $7 \%$ | $7 \%$ | $0 \%$ | $12 \%$ | $7 \%$ | $0 \%$ |
| Yard and Garden | $17 \%$ | $36 \%$ | $0 \%$ | $16 \%$ | $47 \%$ | $17 \%$ |
| Farm Publications | $13 \%$ | $21 \%$ | $0 \%$ | $4 \%$ | $13 \%$ | $0 \%$ |
| Specialist newsletters | $27 \%$ | $36 \%$ | $100 \%$ | $30 \%$ | $20 \%$ | $17 \%$ |
| Newsline | $3 \%$ | $0 \%$ | $0 \%$ | $4 \%$ | $7 \%$ | $0 \%$ |

Number of agents per degree category: 30 1411313

Table 7
Percentages reflect sources used usually and always (By county population)

|  | under |  |  |  |  |  |  |  | over |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| Sources | $\mathbf{1 0 , 0 0 0}$ | $\mathbf{1 0 - 2 4 , 9 9 9}$ | $\mathbf{2 5 - 4 9 , 9 9 9}$ | $\mathbf{5 0 - 1 0 0 , 0 0 0}$ | $\mathbf{1 0 0 , 0 0 0}$ |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Weekly news packet | $16 \%$ | $31 \%$ | $23 \%$ | $50 \%$ | $24 \%$ |  |  |  |  |
| from University | $21 \%$ | $38 \%$ | $30 \%$ | $50 \%$ | $29 \%$ |  |  |  |  |
| Reference materials | $216 \%$ | $47 \%$ | $51 \%$ | $31 \%$ | $35 \%$ |  |  |  |  |
| Personal expertise | $16 \%$ | $12 \%$ |  |  |  |  |  |  |  |
| Requests from specialists | $5 \%$ | $15 \%$ | $13 \%$ | $19 \%$ | $12 \%$ |  |  |  |  |
| Local activities | $16 \%$ | $55 \%$ | $42 \%$ | $56 \%$ | $41 \%$ |  |  |  |  |
| State activities | $5 \%$ | $14 \%$ | $19 \%$ | $25 \%$ | $6 \%$ |  |  |  |  |
| County clientele | $0 \%$ | $12 \%$ | $13 \%$ | $6 \%$ | $12 \%$ |  |  |  |  |
| Personal interviews | $0 \%$ | $5 \%$ | $9 \%$ | $6 \%$ | $6 \%$ |  |  |  |  |
| Telephone interviews | $5 \%$ | $5 \%$ | $6 \%$ | $0 \%$ | $0 \%$ |  |  |  |  |
| Yard and Garden | $11 \%$ | $24 \%$ | $17 \%$ | $19 \%$ | $24 \%$ |  |  |  |  |
| Farm Publications | $5 \%$ | $14 \%$ | $6 \%$ | $0 \%$ | $0 \%$ |  |  |  |  |
| Specialist newsletters | $16 \%$ | $27 \%$ | $23 \%$ | $31 \%$ | $18 \%$ |  |  |  |  |
| Newsline | $0 \%$ | $5 \%$ | $2 \%$ | $0 \%$ | $6 \%$ |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

Number of agents responding in each population category: 19

74
53
16
17

Statistical significance was shown at the .05 level for personal expertise.

## Table 8 <br> Percentage indicates methods used usually and always (By sex)

## Method of delivery

** Agent tape sent to station

50\%
34\%
University tape sent by agent to station

3\% 3\%
** Live broadcast by agent at station

15\% 34\%
Delayed broadcast at station
Written materials sent to station by agent

* Live broadcast via telephone

Delayed broadcast via telephone

Number of agents per category
89
88

Table 9
Percentage indicates methods used usually and always (By age)

| Method of delivery | 25 and below | 26-35 | 36-45 | 45-55 | 56 and above |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Agent tape sent to station | 20\% | 44\% | 48\% | 45\% | 50\% |
| ** University tape sent by agent to station | 0\% | 4\% | 3\% | 6\% | 0\% |
| ** Live broadcast by agent at station | 15\% | 29\% | 31\% | 12\% | 25\% |
| Delayed broadcast at station | 15\% | 12\% | 10\% | 24\% | 17\% |
| Written materials sent to station by agent | 25\% | 32\% | 21\% | 12\% | 8\% |
| Live broadcast via telephone | 10\% | 14\% | 21\% | 27\% | 8\% |
| Delayed broadcast via telephone | 15\% | 10\% | 3\% | 9\% | 17\% |
| Number of agents per category: | 20 | 84 | 29 | 33 | 12 |

## Table 10 <br> Percentage indicates methods used usually and always (By years of employment)

| Method of delivery | 5 or <br> less | $6-10$ | $\mathbf{1 1 - 1 5}$ | $\mathbf{1 6 - 2 0}$ | $\mathbf{2 1}$ and <br> above |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Agent tape sent to <br> station | $33 \%$ | $53 \%$ | $42 \%$ | $47 \%$ | $50 \%$ |
| University tape sent by <br> agent to station | $3 \%$ | $6 \%$ | $0 \%$ | $0 \%$ | $3 \%$ |
| Live broadcast by <br> agent at station <br> Delayed broadcast at <br> station | $25 \%$ | $32 \%$ | $18 \%$ | $27 \%$ | $14 \%$ |
| Written materials sent <br> to station by agent | $25 \%$ | $32 \%$ | $29 \%$ | $20 \%$ | $12 \%$ |
| Live broadcast via <br> telephone | $18 \%$ | $6 \%$ | $17 \%$ | $20 \%$ | $23 \%$ |
| Delayed broadcast via <br> telephone | $10 \%$ | $8 \%$ | $18 \%$ | $0 \%$ | $8 \%$ |

Number of agents per
category: 79
$34 \quad 17 \quad 15$
34

Table 11
Percentage indicates methods used usually and always
(By job category)

| Method of delivery | Ag | Home Ec | County Agent 4H \& Youth | Director | Other |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Agent tape sent to station | 49\% | 38\% | 40\% | 50\% | 0\% |
| University tape sent by agent to station | 5\% | 5\% | 0\% | 0\% | 0\% |
| Live broadcast by agent at station | 16\% | 30\% | 26\% | 25\% | 25\% |
| Delayed broadcast at station | 17\% | 11\% | 19\% | 0\% | 0\% |
| Written materials sent to station by agent | 18\% | 30\% | 24\% | 25\% | 25\% |
| ** Live broadcast via telephone | 27\% | 11\% | 10\% | 25\% | 25\% |
| Delayed broadcast via telephone | 11\% | 9\% | 7\% | 25\% | 0\% |

Number of agents per category:
$63 \quad 66$
$42 \quad 4 \quad 4$
**Indicates significance at the 0.5 level

## Table 12 <br> Percentage indicates methods used usually and always (By degree)

Method of delivery BA MA PHD BS MS Master/Ag.

| Agent tape sent to <br> station | $43 \%$ | $21 \%$ | $100 \%$ | $42 \%$ | $33 \%$ | $83 \%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| University tape sent by <br> agent to station | $7 \%$ | $7 \%$ | $0 \%$ | $2 \%$ | $7 \%$ | $0 \%$ |
| Live broadcast by <br> agent at station <br> Delayed broadcast at <br> station | $23 \%$ | $43 \%$ | $0 \%$ | $24 \%$ | $0 \%$ | $50 \%$ |
| Written materials sent <br> to station by agent | $17 \%$ | $36 \%$ | $0 \%$ | $12 \%$ | $13 \%$ | $17 \%$ |
| Live broadcast via <br> telephone | $23 \%$ | $14 \%$ | $0 \%$ | $26 \%$ | $40 \%$ | $0 \%$ |
| Delayed broadcast via <br> telephone | $17 \%$ | $7 \%$ | $0 \%$ | $6 \%$ | $21 \%$ | $0 \%$ |

Number of agents per category: $\quad 30 \quad 14$
$\begin{array}{lllll}14 & 1 & 113 & 15 & 6\end{array}$
https://newprairiepress.org/jac/vol66/iss2/5

Table 13
Percentage indicates methods used usually and always (By county population)

| Method of delivery | $\begin{aligned} & \text { under } \\ & 10,000 \end{aligned}$ | $\begin{gathered} 10- \\ 24,999 \end{gathered}$ | $\begin{gathered} 25- \\ 49,999 \end{gathered}$ | $\stackrel{50-}{100,000}$ | $\begin{aligned} & \text { Over } \\ & 100,000 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ** Agent tape sent to station | 11\% | 55\% | 43\% | 31\% | 24\% |
| ** University tape sent by agent to station | 0\% | 5\% | 2\% | 0\% | 6\% |
| ** Live broadcast by agent at station | 5\% | 19\% | 30\% | 50\% | 23\% |
| Delayed broadcast at station | 5\% | 16\% | 15\% | 13\% | 18\% |
| ** Written materials sent to station by agent | 21\% | 20\% | 23\% | 50\% | 23\% |
| ** Live broadcast via telephone | 37\% | 13\% | 21\% | 13\% | 0\% |
| ** Delayed broadcast via telephone | 11\% | 12\% | 2\% | 6\% | 23\% |


| Number of agents per <br> category: | 19 | 74 | 53 | 16 | 17 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

**Statistical significance was shown at the 0.5 level.

Job category reflected a number of correlations. The Ag agent drew more heavily from specialist newsletters, farm publications, and Yard and Garden. Local activities were utilized to a greater extent by Ag agents and $4-\mathrm{H}$ and Youth, than by Home Ec agents. State activities were utilized more frequently by $4-\mathrm{H}$ and Youth agents for program source material. The weekly news packet from the university was utilized to a greater extent by Ag and Home Ec agents than by $4-\mathrm{H}$ and Youth.

Program delivery methods varied: 42 percent of the agents sent prepared tapes to the radio station. Years of employment and degree did not yield any significance, while agent age correlations are not definitive. Occupation and sex correlations indicate that an agricultural agent is more likely to conduct live broadcasts via telephone than a Home Ec agent or $4-\mathrm{H}$ and Youth. There was more diversity among Home Ec agents in favored delivery methods: agent tape sent to station ( 38 percent), live broadcast by agent at station ( 30 percent), and written materials sent to station by agent ( 30 percent).

County population did not reflect strong correlations in delivery method. Live broadcasts at the station by agent are more frequent in counties over 25,000 and less than 100,000. In small counties under 10,000; live broadcasts via telephone are more frequent.

There were 13 attitude statements. Table C reflects overall percentages. The value of analyzing each statement for its demographic correlations is unknown at this point and no attempt will be made here to do so. Further analysis may be useful for specific staff development planning.

## Implications and Recommendations

The results of this survey indicate a strong interest in further training in radio programming: How to make a good tape; how (continued, page 34.)

Table 14
Percentage indicates agent strongly agreeing and agreeing with attitude statement.
(By sex)

| Attitude Statement <br> The station is giving me adequate air time. | Male (89) | Female (88) |
| :--- | :---: | :---: |
| I have a strong following for my program- <br> ming. <br> My program is aired at poor listening <br> times. | $80 \%$ | $76 \%$ |
| ** I have enough time to prepare my radio | $50 \%$ | $47 \%$ |
| programs. | $12 \%$ | $10 \%$ |
| ** Radio programming is an effective means |  |  |
| for extension education. |  |  |

$$
\text { **Indicates statistical significance . } 05
$$

https://newprairiepress.org/jac/vol66/iss2/5

# Percentage indicates agent strongly agreeing and agreeing with attitude statement. <br> (By age) 

| Attitude Statement | 25 and below | 26-3536-45 46-55 |  |  | 56 and above |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The station is giving me adequate air time. | 55\% | 82\% | 86\% | 76\% | 75\% |
| I have a strong following for my programming. | 30\% | 46\% | 55\% | 55\% | 58\% |
| My program is aired at poor listening times. | 0\% | 14\% | 10\% | 9\% | 17\% |
| I have enough time to prepare my radio programs. | 45\% | 55\% | 41\% | 52\% | 75\% |
| **Radio programming is an effective means for extension education. | 90\% | 94\% | 86\% | 91\% | 100\% |
| **Rapport with station is important. | 85\% | 94\% | 90\% | 94\% | 100\% |
| **I have a good rapport with the stations I utilize. | 65\% | 88\% | 90\% | 85\% | 92\% |
| I would like assistance from specialists for program material. | 25\% | 30\% | 31\% | 6\% | 25\% |
| **County office should receive copies of material sent by $U$. to station. | 70\% | 75\% | 62\% | 42\% | 75\% |
| I would like more short news items for radio. | 75\% | 81\% | 72\% | 70\% | 66\% |
| I find the weekly info. supplied by Ext. Info. and Ag. Jo. |  |  |  |  |  |
| Dept. to be helpful. | 65\% | 57\% | 72\% | 76\% | 67\% |
| I would frequently use U. education tapes. | 40\% | 23\% | 24\% | 12\% | 33\% |
| **I would make greater use of radio programming if I had more training. | 45\% | 55\% | 17\% | 18\% | 17\% |
| Number of agents responding: | 20 | 84 | 29 | 33 | 12 |

## Table 16 <br> Percentage indicates agent strongly agreeing and agreeing with attitude statement (By years of employment)

| Attitude Statement | 5 or less | Years Employed 6-10 11-15 16-20 |  |  | 21 and above |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The station is giving me adequate air time. | 70\% | 85\% | 82\% | 87\% | 82\% |
| I have a strong following for my programming. | 46\% | 35\% | 65\% | 47\% | 59\% |
| My program is aired at poor listening times. | 88\% | 21\% | 6\% | 7\% | 12\% |
| I have enough time to prepare my radio programs. | 57\% | 41\% | 41\% | 52\% | 56\% |
| Radio programming is an effective means for extension education. | 94\% | 88\% | 82\% | 100\% | 94\% |
| Rapport with station is important. | 96\% | 85\% | 88\% | 93\% | 94\% |
| I have a good rapport with the stations I utilize. | 79\% | 91\% | 88\% | 87\% | 91\% |
| I would like assistance from specialists for program material. | 25\% | 36\% | 30\% | 13\% | 15\% |
| County office should receive copies of material sent by U . to station. | 78\% | 65\% | 53\% | 67\% | 47\% |
| I would like more short news items for radio. | 79\% | 80\% | 71\% | 80\% | 68\% |
| I find the weekly info. supplied by Ext. Info. and Ag. Jo. |  |  |  |  |  |
| Dept. to be helpful. | 62\% | 68\% | 47\% | 87\% | 68\% |
| I would frequently use $U$. education tapes. | 29\% | 18\% | 35\% | 27\% | 12\% |
| **I would make greater use of radio programming if I had more training. | 47\% | 53\% | 24\% | 27\% | 18\% |
| Number of agents responding: | 79 | 34 | 17 | 15 | 31 |agreeing with attitude statement

(By job category)

| Attitude Statement | Ag | Home Ec | County Agen $4 \mathrm{H} \&$ Youth | Director | Other |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The station is giving me adequate air time. | 83\% | 77\% | 71\% | 50\% | 75\% |
| I have a strong following for my programming. | 54\% | 58\% | 24\% | 50\% | 50\% |
| My program is aired at poor listening times. | 13\% | 9\% | 12\% | 25\% | 0\% |
| ** I have enough time to prepare my radio programs. | 46\% | 59\% | 50\% | 50\% | 50\% |
| Radio programming is an effective means for extension education. | 94\% | 96\% | 83\% | 100\% | 100\% |
| Rapport with station is important. | 95\% | 91\% | 90\% | 100\% | 100\% |
| I have a good rapport with the stations I utilize. | 84\% | 86\% | 83\% | 100\% | 75\% |
| I would like assistance from specialists for program material. | 21\% | 30\% | 26\% | 0\% | 0\% |
| County office should receive copies of material sent by U . to station. | 60\% | 72\% | 72\% | 50\% | 25\% |
| I would like more short news items for radio. | 75\% | 85\% | 64\% | 100\% | 50\% |
| I find the weekly info. sup. plied by Ext. Info. and Ag. Jo. Dept. to be helpful. | 70\% | 73\% | 41\% | 100\% | 75\% |
| I would frequently use U . education tapes. | 19\% | 29\% | 27\% | 25\% | 0\% |
| ** I would make greater use of radio programming if I had more training. | 24\% | 56\% | 36\% | 50\% | 0\% |
| (number of agents responding) | 63 | 66 | 42 | 4 | 4 |

## Footnote to data tables 17 and 5

The data for these tables was retabulated due to the high incidence of statistical significant found per item. It was felt that the categories of director and other due to the small numbers in each might be throwing

## Table 18 <br> Percentage indicates agent strongly agreeing and agreeing with attitude statement (By degree)

| Attitude Statement | BA | MA | PHD | BS | MS |
| :---: | :---: | :---: | :---: | :---: | :---: | Master/Ag.

[^1]
## Table 19 <br> Percentage indicates agent strongly agreeing and agreeing with attitude statement (By county population)

| Attitude Statement | $\begin{aligned} & \text { under } \\ & 10,000 \end{aligned}$ | $\begin{gathered} 10- \\ 24,999 \end{gathered}$ | $\begin{gathered} 25- \\ 49,999 \end{gathered}$ | $\begin{gathered} 50- \\ 100,000 \end{gathered}$ | $\begin{aligned} & \text { over } \\ & 100,000 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The station is giving me adequate air time. | 53\% | 86\% | 71\% | 75\% | 59\% |
| I have a strong follow. ing for my programming. | 42\% | 54\% | 49\% | 56\% | 24\% |
| My program is aired at poor listening times. | 5\% | 10\% | 17\% | 6\% | 12\% |
| I have enough time to prepare my radio programs. | 47\% | 56\% | 48\% | 67\% | 41\% |
| Radio programming is an effective means for extension education. | 95\% | 93\% | 96\% | 100\% | 65\% |
| Rapport with station is important. | 84\% | 95\% | 93\% | 100\% | 88\% |
| I have a good rapport with the stations I utilize. | 63\% | 91\% | 91\% | 88\% | 65\% |
| I would like assistance from specialists for program material. | 16\% | 31\% | 19\% | 38\% | 12\% |
| County office should receive copies of material sent by U . to station. | 69\% | 68\% | 62\% | 88\% | 53\% |
| I would like more short news items for radio. | 53\% | 77\% | 83\% | 81\% | 71\% |
| I find the weekly info. supplied by Ext. Info. and Ag. Jo. |  |  |  |  |  |
| Dept. to be helpful. | 74\% | 64\% | 64\% | 56\% | 71\% |
| I would frequently use <br> U. education tapes. | 37\% | 26\% | 21\% | 13\% | 24\% |
| I would make greater use of radio programming if I |  |  |  |  |  |
| had more training. | 26\% | 41\% | 42\% | 44\% | 29\% |
| (number of agents responding) | 19 | 74 | 53 | 16 | 17 |

to organize programs for maximum value; how to develop popular programs; and, improvement in voice delivery. These are areas of training most often requested. Confidence in the use of radio will undoubtedly increase agent success in appropriating air-time.

Another need expressed is for more short news items for radio. Training and/or materials that would enable agents to synthesize news from state and local activities appears to be a strong need expressed.

Preparing the broadcast tape is another training dimension. A majority of agents send prepared tapes to stations.

While source materials have been shown to be job specific, there remains a reliance on University source materials for program preparation. This relationship can be encouraged by training agents techniques in effective source utilization.

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[^0]:    Mangan is in the Department of Agricultural Journalism, University of Minnesota.

[^1]:    off the results. However, after searching the surveys physically, and placing individuals in one of the three main categories the response significance was still established for the three main categories.

