

Using Focus Groups to Develop an Extension Home Horticulture Public Radio Program

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Abstract

Since its creation in 1914, Cooperative Extension has evolved to include a variety of traditional and nontraditional program areas. To reach new clientele, Extension must create programs that appeal to more generalized audiences and that communicate public value. One area that has the potential to create public value with nonagriculturalists is home horticulture. The application of marketing analysis, planning, implementation, and management should be used to reach this audience and provide better service. The University of Florida Extension Service uses an integrated marketing communication (IMC) approach to convey the role Extension plays in the state and in local communities. One component of this approach has been the development of a home horticulture radio show to be broadcast on National Public Radio (NPR) stations. Two focus groups consisting of target audience members (both users and nonusers of Extension) evaluated potential topics and formats for the radio program. Participants preferred topics dealing with plant selection and basic maintenance in the climatic zone of North Central Florida. They preferred the radio show name to mention the 2-minute time format and favored the use of the word "gardening" over "landscaping." They also wanted the radio show to be linked to a Web site and wanted both the Web site and radio show to use a question-and-answer format. Overall, the focus group method was effective in discovering audience preferences.

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Courtney Meyers, Tracy Irani, and Erin Eckhardt

Abstract

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So What?

Through the use of mass media, Extension can provide more information to more people, but the programs must attract attention and fulfill audience members' needs. This study used focus groups to assist with the development and fine-tuning of a home horticulture radio program in Florida. The authors discuss how audience feedback was gathered and used to structure and name the program, ensure that content met clientele needs, and establish Extension as a reliable source for this specialized information.

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Since the creation of the Cooperative Extension Service in 1914, its major programming areas have undergone changes to meet the needs of its clientele. Originally, Extension agents focused on traditional agricultural production topics, but today, agents work in a variety of traditional and nontraditional program areas, including small farms, urban horticulture, home horticulture, family and consumer sciences, environment and natural resources, and 4-H youth development (Cooperative State Research, Education, and Extension Service, 2005).

Because of changing demographics and the changing structure of agriculture, Extension must continue to explore new options for reaching its clientele (Meier, 1989). Extension professionals should listen to those they serve to find out what practical education needs exist and then be responsive to the perceived needs of customers (Greene, 1995). Failure to assess client needs is a probable factor in the underutilization of some Extension programs (Duncan & Marotz-Baden, 1999). To remain viable, Extension must find new ways to reach its consumers, as well as potential new clientele. Reaching new audiences, however, requires formative research designed to assess consumer reactions to message strategies and delivery mechanisms in order to find the most effective means. This study used focus group methodology to evaluate an Extension strategy to provide home horticulture information to an increasingly diverse audience.

Literature Review

To reach new clientele, Extension must create programs that appeal to more generalized audiences and communicate public value. One area that has the potential to create public value with nonagriculturalists is home horticulture, more commonly known as landscaping and gardening. Home horticulture is an important pastime for many Americans. The National Gardening Association (2006) reported that 83% of all U.S. households participated in one or more indoor or outdoor lawn and garden activities in 2005.

Although Extension horticulture agents offer many services in this area (such as the Extension-based Master Gardeners program), local and national media outlets often provide strong competition in terms of awareness and share of voice (Kelly & Wehry, 2006). Commercial and publicly funded media programs that reach home horticulturalists today include both radio and television shows. National Public Radio (NPR), for example, airs Ketzler Levine's *Talking Plants* on two different shows: *Weekend Edition Saturday* and *Morning Edition*. Levine also has a Web site that tells of her adventures with plants in remote areas and in other countries (Levine, 2003). *Rebecca's Garden* is a 30-minute program on the Home and Garden Television network

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(HGTV) that has expanded beyond gardening information to include crafts and home improvement information (*Rebecca's Garden*, n.d.). *The Victory Garden*, on the Public Broadcasting Service (PBS), is another popular show among home horticulturalists. Airing on PBS since 1975, this program addresses new horticultural techniques for the home while emphasizing tried and true practices (WGBH Educational Foundation, 2005).

To better serve their communities, Extension professionals have to develop innovative ways to reach their target audiences. Extension must reach its consumers using strategies that create awareness, stimulate interest, and encourage participation (Chappell, 1994). Mass media channels offer the most potential for reaching the largest number of consumers with relevant educational information (Arens, 2002).

Radio, television, newspapers, magazines, and the Internet are important to consumers searching for gardening information (Varlamoff, Florkowski, Latimer, Braman, & Jordan, 2002). Radio can be an effective tool for reaching audience members who are not familiar with Extension, and Extension should consider using radio more frequently to target specific audiences (Romero-Gwynn & Marshall, 1990). In a study to determine the preferred source for gardening information, Kelly and Wehry (2006) found mass media information sources—such as gardening television programs, magazines, and radio programs—were all used more frequently than county Extension offices, university Web sites, or the Master Gardeners program.

Marketing Extension

The application of marketing analysis, planning, implementation, and management improves Extension's ability to reach its audience, react to changing needs, and provide better service overall. Marketing research has been used to evaluate Extension programs and conduct needs assessments (Irani, Ruth, Telg, & Lundy, 2005; Skelly, 2005). Developing a marketing approach can be difficult and complex (Chappell, 1994), but the Cooperative Extension Service can benefit from an integrated approach focused on marketing communications (Maddy & Kealy, 1998).

Integrated marketing communication (IMC) strives to integrate communication efforts so that the message to the recipient is a concise, clear picture of the item being promoted (Schultz, 2005). An IMC strategic plan includes three critical components: brand essence, target audience, and persuasion tools (Thorson & Moore, 1996). A brand can simply be a product name that indicates tangible qualities, such as performance, appearance, package, and guarantees. A brand can also possess intangible qualities, such as attitudes toward the brand itself and its attributes. An integrated, strategic marketing focus is an ideal approach to communicating about the Extension

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brand. With effective programs and marketing, Extension can develop a positive experience for target audience members—one they can relate to in the future (Maddy & Kealy, 1998).

In IMC, the target audience or target market is the group at whom the persuasion tools are aimed. Researchers argue that more work is needed to examine Extension's target audience to determine how these individuals receive information about services and programs and how they prefer to receive that information (Maddy & Kealy, 1998). To understand the audience, one must understand how and why individuals choose to use a specific media channel. Boone, Sleichter, and Miller (2003) found that nonusers of Extension services in Kansas were more familiar with the mass media (newspapers, radio, and television) as a method of receiving information than Extension users, who preferred newsletters, newspapers, and classes/meetings. It follows that, in developing marketing plans designed to reach new prospects, the mass media would be a logical venue to use when attempting to reach nonusers.

IMC involves the coordination of all communication efforts for a particular entity, using persuasion tools classified as public relations, direct marketing, promotions, packaging, and advertising. Basically, it means using one voice to reach consumers through several communication channels. When applied to Extension, IMC can be used to recognize needs, develop programs to meet those needs, target messages to specific audiences, and communicate about Extension's purpose, programs, and impact (Warner, 1993).

The University of Florida's Extension Service is utilizing the IMC approach to communicate the public value of Extension to its audience. One component of this IMC approach is the development of a home horticulture radio show to be broadcast on NPR stations. NPR provides commercial-free news, talk, and entertainment programming to an audience of 26 million Americans each week through more than 780 public radio stations. Each NPR station serves listeners with a combination of national and local programming to meet its audience's needs (National Public Radio, 2005).

Radio has a rich history of reporting agricultural news, but as the percentage of Americans engaged in agricultural production has decreased, so has the number of radio programs devoted to agricultural topics (Boone, Meisenbach, & Tucker, 2000). Since many public radio stations are housed at colleges and universities, including most land-grant institutions, collaborations between academic units and public media outlets have begun to take place. In the Gainesville, Florida, market, two such collaborations are airing—the University of Florida and Shands Health Care System produce

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Health in a Heartbeat, and the University of Florida's Institute of Food and Agricultural Sciences produces *Family Album Radio*. Both programs use a 2-minute scripted format with a female on-air vocal talent.

Purpose

The purpose of this study was to observe the reactions of both users and nonusers of Extension services when presented with the concept of using a public radio program to convey home horticulture information. Specific research questions that guided this study were as follows:

RQ1: How do users and nonusers of Extension services respond to the utilization of a broadcast medium channel (specifically, a 2-minute program segment on NPR) to disseminate Extension information about home horticulture?

RQ2: How do users and nonusers of Extension services perceive and evaluate elements of such a program, including potential topics, title, format, and structure?

Methods

A qualitative research design was used in this study. In qualitative research, the researcher acts as the data collection instrument, gathering words or pictures and analyzing them inductively. The qualitative approach explores topics not easily explained by existing theory and provides a more detailed explanation of the phenomena being researched (Creswell, 1998). Focus groups are one form of qualitative research that "can provide insight into complicated topics where opinions or attitudes are conditional or where the area of concern relates to multifaceted behavior or motivation" (Krueger, 1994, p. 45).

An important feature of focus groups is their ability to produce data and insights that may not be evident without group interaction (Morgan, 1997). Focus groups create a welcoming environment for people to share their opinions and comments. The format of a focus group allows the moderator flexibility to probe unanticipated issues that may not be discovered by a more structured questioning design. Focus groups have high face validity because the technique is easily understood and results are presented in an uncomplicated format (Krueger, 1994).

In Extension, focus groups can identify needs and restrictions that other methods of assessment may overlook. Data from focus groups in the Extension field can be used before a program begins (needs assessment) or to evaluate an ongoing program (Allen, Grudens-Schuck, & Larson, 2004). Focus groups have contributed to improving Extension by helping

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professionals recognize ineffective plans or programs and have also provided information in advance about how participants will respond to programs (Gamon, 1992).

This study used a set of two focus groups composed of representative members of the target audience. A market research firm was hired and used telephone random digit dialing sampling to qualify potential participants. Participants were screened to identify those who listened to NPR and were involved in home horticulture. Using the initial list of screened participants, the researchers qualified participants based on age, gender, and income to achieve a representative group. The market research firm contacted and recruited 24 participants (12 for each session). Of the recruited participants, 16 attended the focus groups, with 8 in each session. Participants included an even distribution of males and females (four of each sex in both groups) and a mix of ages (35-55+) and annual income levels (above and below \$30,000). Participants in both groups included users and nonusers of Extension services. Each participant received \$50 as an incentive at the completion of the focus group session. The focus group protocol was evaluated for face and content validity by faculty in the Department of Agricultural Education and Communication at the University of Florida.

The focus group moderator followed a questioning route to guide the group discussion. After participants signed informed consent forms, the moderator gave a brief explanation of the focus group's purpose and procedure. To become comfortable speaking in the group environment (Krueger, 1994), participants introduced themselves and described their interest in home horticulture.

The moderator began asking introductory questions to encourage participants to reflect on experiences and to think about the topic (Krueger, 1994). These questions addressed where participants received information about home horticulture, common questions they had about home horticulture, and topics they thought should be discussed on a radio program. The moderator wrote the generated topics and common questions on a whiteboard. After an exhaustive list was created, participants ranked their top three topics. This brainstorming process was also used to list creative names for the proposed home horticulture radio show. After this discussion, participants were shown three preselected radio show names and asked for their reactions. Participants then ranked their top three choices for show titles based on the preselected names and the titles they generated through brainstorming. Participants in the second focus group were also given the names generated in the first group to reach a consensus on the most popular radio show names.

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The assistant moderator played an example of a complete 2-minute radio show to allow participants to evaluate it. Participants commented on their overall impressions, explained what they liked or did not like, and offered suggestions for improvement. Three more short introductions were played to get additional feedback. At the conclusion of the radio show examples, participants were asked if they had any additional comments. Each session lasted less than 2 hours.

The sessions were audio- and video-recorded to improve the trustworthiness and completeness of the findings. During the group discussion, the assistant moderator took detailed written notes and captured complete statements. Recordings from both sessions were transcribed and analyzed by researchers to identify common themes, reactions to message stimuli, similarities, and dissimilarities.

Data were analyzed using Glaser's constant comparative technique (1978). This technique is based on comparative analyses between or among groups of people within a particular area of interest. This comparative analysis allows the researcher to identify patterns and relationships within the collected data (Glaser, 1978). An audit trail—including original data analysis, codes, semantic relationships, and listing of all domains—was kept for verification and trustworthiness purposes.

Results

In response to questions about how they found information on home horticulture, both groups indicated that their preferred source was the Internet, specifically Google searches and specific sites, such as UF/IFAS, county Extension, USDA, and chat rooms and discussion forums. In addition to the Web, media sources mentioned included radio and TV broadcast gardening shows (including the HGTV network and the PBS-syndicated *The Victory Garden*), newspaper columns, magazines, books, and community resources, such as gardening societies, public gardens, and farmers' markets.

Participants expressed that most of these information sources were fairly generic, which was problematic for home horticulturalists because of the influence of climate zone on horticulture techniques, and for them in particular because of the uniqueness of the North Central Florida climate zone. In response to these general comments, participants in both groups mentioned the county Extension office as a resource that provided good, localized information. As one participant phrased it, the county Extension office was "the only place to find good information for this area."

In general, participants were favorably disposed toward the idea of disseminating Extension home horticulture information via public radio.

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Several participants in each group asked when the show would air and indicated that they would be interested in listening to it. "You can tell we're always interested in finding out new things," said one participant, commenting on a lively exchange between focus group members that focused on information sources, including radio programs they had used previously when seeking horticulture information.

Potential Topics of Interest

During both focus groups, participants were asked to list topics they thought they might be interested in hearing on a radio program. Participants in both groups identified a broad list of topics, which they called out while the moderator wrote them on a whiteboard. Topics included plant diseases; climate zones; pest control; soil; types of plants, trees, and ground cover; and specific types of gardening and landscaping. Many of the topics were listed by both groups.

Both groups were asked to rank the most important topics based on the list they had generated. Participants in the first focus group ranked pest control as the number-one topic, followed by design, zones/plant selection, and plant basics. The second focus group ranked plant selection as number one, followed by proper maintenance and timing/scheduling (when to plant). Comparison between the ranked topics and in relation to the brainstormed set of topics yielded a determination that consensus between both groups existed for the "plant selection" (directly chosen by both groups) and "plant basics" topics ("maintenance" and "planting schedules" were considered subsets of "plant basics").

Perceptions and Reactions to Program Names and Format

Another one of the group's major objectives was to learn participant perceptions and reactions to potential names and formats for the proposed radio program. Radio had previously been used by county faculty and commercial enterprises on an ad hoc basis to educate consumers interested in home horticulture. The proposed program, however, was developed as a component of an integrated marketing effort designed to communicate the public value of Extension and serve both existing clientele and potential new audiences. As such, requesting audience input and reaction to possible program names and formats was deemed crucial to the program's future success.

To discover participant attitudes and mitigate any potential researcher bias, researchers used both aided and unaided questioning techniques. For the unaided questioning, participants in both focus groups were asked to brainstorm potential program names based on minimal information given by the moderator. This information indicated to participants that the program in

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question was designed to be a radio program about home horticulture that would run on an NPR station. Once participants developed a list of names, researchers used aided questioning to obtain reactions to three previously identified potential names. These names were *The Garden File*, *Landscape Minutes*, and *Sunshine Gardening*.

The unaided portion of questioning yielded 7 to 15 name options in both groups, mostly using alliteration and/or the word "garden." In the aided portion, reaction to the three previously selected names was mixed, with both groups finding the name options, especially *The Garden File*, "too academic," "boring," or "too old." Neither group liked the use of the word "landscape" in the show name. As one participant noted, "It makes it sound like it's for professionals only." *Sunshine Gardening* was preferred more by the first group, who found it "more positive," "more specific to Florida," and "inviting." The second group thought this name option was "not great, but better," "not specific to Gainesville" (where the show would run initially), and "not what the show needs; too long."

Interestingly, although a wide variety of names came up during the unaided section, both groups focused on the length of the program as the source for a potential name once they learned the program would be 2 minutes in length (a standard NPR format). In the ensuing discussion, names focusing on the length were clearly favored. Several participants noted that since potential topics could easily take half an hour or more to cover, the ability of the name to telegraph the length and the fact that the show would focus on short, quick segments of useful information was crucial. One participant said, "Radio is a medium where length makes all the difference." Another indicated that she would be more likely to stay tuned to the program if she knew from the name how long the program would be.

Following extended discussion, both groups ranked their top three name choices. The first group selected *Gardening Moments*, *The Two-Minute Gardener*, and *Green Thumb Gardener*; the second group chose *The Two-Minute Gardener*, *Sunshine Gardening*, and *Horticulture Happy Hour*. This finding suggested a preference among both groups for a name conveying the length of the program. Participants said this added a bit of extra information that made the title of the program more important to them, and that this would enhance listeners' interest and desire to stay tuned.

With respect to format, both one- and two-voice audio clips were aired for participants. Reaction to the show format, which consisted of an introduction followed by a scripted narration and closing, was fairly mixed. Although most participants liked the short, 2-minute format, the consensus in both groups was that a scripted narration was "too formal," "too technical

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and academic," and "too much information." Unaided, participants provided many suggestions for show formatting, including use of an unscripted two-person dialogue (akin to the well-known and long-running NPR radio program *Car Talk*), use of a female voice, occasional inclusion of call-ins and some form of question-and-answer segment, and inclusion of guests on the show. Most suggestions seemed focused on creating interaction and two-way relationships between the show host(s) and listeners.

The desire for interaction was further emphasized by participants' unaided suggestions with respect to the Web. All participants said that integration between the radio program and the Web site was extremely important. Unaided, they suggested that the program be directly linked to the Web site, with audio clips of program segments available for download on the Web; that the radio show reference the Web site for listeners who wanted to obtain more in-depth information; and that the Web site include frequently asked questions, question-and-answer databases, and discussion forums to support the radio program.

Discussion and Recommendations

In general, within the demographic selected for the focus group study (adults, ages 35-55+, mid- to upper-income range), gardening interest, information-seeking behavior with respect to media sources and channels, and NPR listenership were strongly related.

Chappell (1994) said Extension must reach its consumers using strategies to create awareness, stimulate interest, and encourage participation. Most participants who were aware of and using the Extension office for their home horticulture information-seeking needs valued the experience because of the localized information specific to climatic conditions and growing zones. All participants were frequent information-seekers who used media channels on a regular basis to satisfy information-seeking needs. However, these individuals saw a broadcast initiative as an extension of, and not a replacement for, the information they could attain through means other than the mass media; this perception was common among those who did and those who did not use the county Extension office.

Radio is an effective medium to reach nontraditional audiences (Romero-Gwynn & Marshall, 1990) and to provide gardening information (Kelly & Wehry, 2006). Participants were generally enthusiastic about the potential of Extension's use of radio (in combination with the Web) to extend informal education in the home horticulture area, and they agreed on a fairly large number of potential topics that they would like to see covered in a radio show format.

Previous listener experiences seemed to influence expectations for program characteristics and packaging. Participants preferred information in the program title to indicate program characteristics (such as show length and topics). In addition, when making suggestions about vocal talent, program format, and structure, participants may have been influenced by exposure to other programs focusing on home horticulture on both radio and television, as well as well-known NPR radio programs (*Car Talk* nationally; *Family Album Radio* and *Health in a Heartbeat* locally).

Overwhelmingly, participants used the Web as a major source for gardening-related information and advocated strong ties between the proposed radio show and a companion Web site, which could be the repository for more detailed information and could easily include some of the more interactive components they favored (frequently asked questions, discussion forums, archives).

Maddy and Kealy (1998) recommended more investigation into Extension's target audience and that audience's information-seeking behavior. Understanding audience needs and providing appropriate programs can encourage the use of Extension programs (Duncan & Marotz-Baden, 1999). In general, this study emphasizes the value of using market research to help determine the most effective delivery, packaging, and positioning of Extension's informal education efforts through mass media channels. These channels can be costly to use, but they offer the potential to reach wider, nontraditional audiences. In light of limited resource availability in many Extension programs, it is increasingly important to understand how to leverage marketing efforts to promote Extension to existing clientele and increase awareness of the value of Extension services among more urbanized audiences (Irani, Ruth, Telg, & Lundy, 2005).

Market research should be used when designing and evaluating Extension programs that use media channels for nontraditional audiences. Results from this study provide specific recommendations for the development of a home horticulture radio program. They are as follows:

- Ideally, the broadcast program's name should convey its nature. It should help listeners understand how long the program is and whether it is informal or formal, and should include words that are meaningful to the audience.
- Preferred program elements included two-person dialogue, a female voice, guests, and a mechanism to answer audience questions.

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- A Web site should accompany the radio program to provide additional information on featured topics, an archive of programs, frequently asked questions, and opportunities for audience members to interact with show hosts and each other. This interactivity could be achieved through the use of a chat room or discussion board.

Findings from this study also suggest several areas of need for future research. First, focus group methodology should be used to conduct a follow-up study to evaluate how well suggestions from this project were implemented. Second, assuming a Web site is developed, usability testing should be conducted to gather feedback and suggest improvements. Third, research should be conducted to measure perceptions and attitudes of other stakeholder groups in this marketing effort, such as Extension agents and Master Gardener volunteers. Finally, an ongoing need exists to better understand Extension's target audiences and the potential for integrated message content and mass media channels to reach them.

About the Authors

ACE members Courtney Meyers and Tracy Irani are in the Department of Agricultural Education & Communication at the University of Florida. Meyers is a Ph.D. student in agricultural communication and Irani is an associate professor. Erin Eckhardt is a horticulture lead at Discovery Cove in Orlando. This article is based on a paper presented at the 2006 ACE meeting in Quebec City, Quebec, Canada.

Keywords

Extension, integrated marketing communication, focus group, radio, home horticulture

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