Information-Seeking Practices of County Extension Agents

Abstract

The purpose of the study reported here was to examine the educational resources used by Montana State University Extension county agents. An online survey was administered to evaluate agents' informational needs. Agents reported client questions (93.8%) and program/workshop planning and presentations (91.7%) as the main reasons for seeking information. When using the Internet, respondents filtered by university, Extension, and other .edu sources. Agents rated trustworthiness and quality of the informational source as the most important factors. The most common barrier was lack of time. Preferences for professional development were budget conscious opportunities, technical subject education, program planning, and research education.

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Introduction/Theoretical Framework

Extension agents face unique challenges in finding precise information when trying to meet the educational needs of their clientele. Serving as a liaison between university specialists and the general public is a daunting task, particularly when an agent is trying to decipher what information is most credible. Radhakrishna and Thomson (1996) and Shih and Evans (1991) recognized the inevitable impact the Internet would have on Extension agents' information gathering techniques, but few follow-up studies have been conducted to assess the magnitude of that change. Technological advances have changed the way professionals access information in every field, and Extension is no exception.

Smith, Hoag, and Peel (2011) interviewed county agents on specific traits that allowed them to be identified by others as exceptional. The primary finding was, "Research—having all the facts and knowledge to make educated decisions and being able to back those decisions up with research based information" (p. 5). High-quality resources, timeliness, work ethic, and relationships were also important traits. These findings indicate that it is vital to the agent's success to have access to and know how to use resources. Being able to find research-based information for clients in a timely manner was particularly critical for new county agents to provide effective programming (Brodeur,

Higgins, Galindo-Gonzalez, Craig, & Haile, 2011; Smith et al., 2011).

Leckie, Pettigrew, and Sylvain (1996) created a model of information-gathering techniques. They proposed that tasks undertaken by professionals correlate to the information-seeking process, and the methodology used to find the information is influenced mainly by their work roles. Five frequently mentioned work role examples are service provider, administrator/manager, researcher, educator, and student (Leckie, et al., 1996). According to Franz and Townson (2008), Extension agents share similar work roles. These roles affect the tasks performed on a daily basis, which then influence the information needs of the professional. To address these needs, professionals use known information resources and select preferred resources based on a number of factors, including personal, professional, and external.

Previous research identified Extension specialists, other agents, supervisors, and local business and school employees as the primary sources of agent information (Radhiakrishna & Thomson, 1996). In 1999, marketing researchers indicated that the Internet changed the way consumers search and find information (Doherty, Ellis-Chadwick, & Hart, 1999; Van der Poel & Leunis, 1999). Taking this change into account, it was important to expand Radhakrishna and Thomson's (1996) findings. In light of budget cuts and the changing infrastructure within the Cooperative Extension Service, understanding where and why agents search for information will help Extension specialists disseminate information to county agents. A working knowledge of current information seeking practices also gives new agents a place to start, particularly in single-agent and rural counties. Access and knowledge of appropriate resources was identified by Brodeur et al. (2011) as a primary competency that new agents should master within the first year. The authors also acknowledged that many agents may not acquire these skills in their college careers, indicating a need for more structured education on finding and using appropriate resources. Findings from the research reported here can be used to help outline information access and professional development strategies for all within Extension.

Purpose and Objectives

The purpose of the study reported here was to examine the educational resources used by Montana State University Extension agents. The three main objectives were to: (1) Describe information seeking practices Extension agents use to educate and provide solutions for clientele; (2) Identify any perceived barriers to accessing appropriate educational resources, and (3) Identify agents' professional development needs for information.

Methods and Procedures

The population for the study was 86 County Extension agents in Montana employed during Spring 2012. An online survey was designed via SurveyMonkeyTM. Questions were derived from previous literature on information-seeking practices of various types of professionals (Leckie, et al., 1996; Radhakrishna & Thomson, 1996). Data collection procedures outlined by Dillman, Smyth, and Christian (2009) were followed for Web survey implementation. The survey consisted of 18 total questions. The final response rate was 55.8% (48 out of 86). Descriptive statistics, means, frequencies, and percentages were analyzed using SurveyMonkey and Microsoft Excel. Free-response themes were analyzed using a conventional content analysis (Hsieh & Shannon, 2005). Codes were

sorted into emergent categories based on how they were related and linked (Hsieh, & Shannon, 2005).

Results/Findings

Objective One: To Describe Information Seeking Practices Extension Agents Use to Educate and Provide Solutions for Clientele

Agents overwhelming reported client questions (93.8%) and program/workshop planning and presentations (91.7%) as the main reasons for seeking professional, work-related information. Other reported reasons were professional development (68.8%), grant research (39.6%), and research projects (33.3%). Extension publications, research journals, and university specialists were the most extremely credible sources, while the Internet was the least credible source. Respondents unanimously reported that when searching for information via the Internet, they filter information by university, Extension, and other .edu sources. The information sources used on a daily to weekly basis were the Internet (54.2%) and Extension publications (68.8%), while fellow agents, university specialists, books, and information from presentations and workshops, and local agencies were used on a weekly to monthly basis. Notably, the Internet was also reported as the least credible in the previous question. The sources used the least were research journals and eXtension.

Agents rated trustworthiness and quality of the source as the most important factors for professional use, followed by accessibility, timeliness, familiarity and prior success, and cost. Agents rated the perceived quality of information sources used for professional development. University specialists and fellow agents were rated as very good to excellent sources; print and/or online Extension publications, information from presentations, workshops, and conferences, and research journals were rated very good to good, while the Internet, books, and eXtension were rated adequate.

Objective Two: To Identify Any Perceived Barriers to Accessing Appropriate Educational Resources

The top three barriers faced when searching for information for professional purposes were divided into four categories: (a) technological barriers, including slow Internet connections and blocked access to certain websites; (b) quality of information, research, and publication sources; (c) support staff, time, and budget constraints; and (d) inadequate responses from specialists or vacant specialist positions. The most frequent response was "lack of time."

Objective Three: To Identify the Professional Development Informational Needs of Extension Agents

Preferences for professional development opportunities related to informational needs were summarized into four themes: (a) online and budget-conscious professional development opportunities for agents with minimal travel funds; (b) more technical education in the areas of natural resources, horticulture, family and consumer sciences, forestry, and social networking; (c)

program planning assistance and guidance; (d) research education regarding terminology, continued formal education, and selecting appropriate/best sources of information.

Conclusions

Respondents primarily sought information to respond to clientele questions and develop programming. The Internet was most commonly used on a daily basis to find university, Extension, and other .edu sources for credible information. Extension publications, research journals, and university specialists were considered the most credible information sources to answer client questions, while the Internet was the least credible. Respondents also used the Internet, Extension publications, and fellow agents on a weekly or daily basis, while eXtension was rarely to never used. Cost was the least important factor when evaluating information sources, while trustworthiness and quality were the most important. The perceived quality of informational sources was mostly very good to excellent on all sources except for books, eXtension, and the Internet. The most common barrier faced when searching for information was lack of time. Most common preferences for professional development included budget-conscious opportunities with minimal travel, technical area education, program development, and research education.

Recommendations/Implications

Agents are highly educated and interested in learning more about how to improve their information-seeking practices. Based on a demographic profile, the agents were representative of employees in the entry and colleague stages of Kutilek, Gunderson, and Conklin's career stages model (2002). Successful organizational strategies to improve informational practices guided by their model might include: peer mentoring programs that partner different stages of agents and expertise; professional support teams in technical, programming, and research areas to address reported deficiencies; continued on-the-job training by qualified experts; requirements for leadership positions in local, state, and national organizations to build networks and broaden knowledge; and offering specialized funds to further innovative research and education opportunities for professional growth and vitalization. These recommendations can be applied to any state Extension organization as professional development strategies.

As expected, the majority of agents sought information for clients and programming, which aligns with any Extension educator work responsibilities. However, there were uncertainties expressed as to where to find and what is considered credible information. The Internet was the most widely used resource on a daily basis, but also considered the least credible. Future research must be conducted to evaluate why agents rely so heavily on the Internet as a source of information that they don't completely trust. Possible reasons may include advanced academic search engines, ease of use and accessibility to online journals and databases, and the current culture of technology behaviors, including familiarity and history of Internet use (Nazim, 2008). Teaching agents about website credibility models and assessment methods can also assist in evaluating the trustworthiness and quality of information (Metzger, 2007).

Respondents unanimously reported that when searching for information via the Internet, it was filtered by university, Extension, and other .edu sources. Therefore, it is important that specialists and researchers add information and links on these websites for easier access. Having several

websites with the same information can increase visibility. University specialists were another common source of information. However, when there is a lack of specialists or response by specialists, this creates a significant barrier to an agent's information access. It is important for the university to maintain and employ specialists who provide technical assistance so that agents can have a reliable source of research-based information available for clients. Fellow agents were also used on a weekly basis to gain information. Developing professional networks and opportunities for information exchange can be a critical professional development opportunity for agents. By having these connections to rely upon, an agent can expand the resources and solutions to properly respond to the community. Required membership and/or leadership in professional associations at an early career stage might be an additional component of an agent's responsibilities that can help build networks at a critical time period of professional growth.

Technology was a significant barrier encountered when searching for information. Techniques and strategies for overcoming this barrier must be developed to develop confidence in technological skills. Annual conferences should be developed focused specifically on technologies to update agents on new developments. Specialists in education, agricultural communication, technology development, information technologies, and social media should be consulted when developing these opportunities. eXtension was originally developed by land-grants to connect university resources and experts to the community. However, findings from this research show that this communication channel is not being used as an informational source. Additional research must be conducted on why this resource is not being used and barriers to its use. Obtaining direct feedback from agents about how eXtension can be more relevant as a national resource must be a priority. Additionally, a study of current eXtension resources areas that are successful should be evaluated to identify what aspects, people, information, technologies, and features make it popular to users. These factors of success can then be used to redesign a more trustworthy and high quality information system that can be accessed without hesitation.

Lack of time was the most common barrier faced by agents when searching for information. Although this barrier cannot be eliminated completely, changes can be made within the organization to help alleviate this barrier. Support staff positions should be maintained; Extension specialist positions should be filled in an appropriate amount of time; and online, regional, and 1-day trainings should be considered in addition to face-to-face opportunities. A professional mentor or community of practice dedicated to assisting agents with time management, technology skills, information-seeking strategies, and reliable sources of information may also prove valuable.

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