

12-1-2007

Communication Channel Preferences of Corn and Soybean Producers

Melea AR Licht

Iowa State University, mreicks@iastate.edu

Robert A. Martin

Iowa State University, dmartin@iastate.edu



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

Recommended Citation

Licht, M. A., & Martin, R. A. (2007). Communication Channel Preferences of Corn and Soybean Producers. *The Journal of Extension*, 45(6), Article 11. <https://tigerprints.clemson.edu/joe/vol45/iss6/11>

This Research in Brief is brought to you for free and open access by the Conferences at TigerPrints. It has been accepted for inclusion in The Journal of Extension by an authorized editor of TigerPrints. For more information, please contact kokeefe@clemson.edu.



December 2007 // Volume 45 // Number 6 // Research in Brief // 6RIB2



PREVIOUS
ARTICLE



ISSUE
CONTENTS



NEXT
ARTICLE



Communication Channel Preferences of Corn and Soybean Producers

Abstract

The study reported here sought to identify the types of communication channels Iowa corn and soybean producers prefer for agricultural information. Data were gathered through focus groups and analyzed using theme coding and qualitative data charts. Conclusions included: 1) producers looked to Extension for assistance in evaluating information from other sources rather than acquiring information; 2) producers preferred a variety of communication channels; 3) producers highly preferred consultations; 4) producers preferred mass media channels for general information and interpersonal communication channels for specific and applicable information; 5) among mass media channels, producers preferred radio; and 6) among interpersonal channels, producers preferred consultations.

Melea A. R. Licht

Communications Specialist
Department of Agronomy
mreicks@iastate.edu

Robert A. Martin

Professor and Chair
Department of Agricultural Education and Studies
drmartin@iastate.edu

Iowa State University
Ames, Iowa

Introduction

Extension educators use a variety of communication channels to deliver their educational programs. Numerous studies show producers prefer a combination of communication channels when getting their agricultural information and specifically prefer interpersonal communication methods (Bruening, Radhakrishna, & Rollins, 1992; Dollisso & Martin, 1999; Israel, 1991; Kotile & Martin, 2000; Lasley, Padgitt, & Hanson, 2001; Richardson & Mustian, 1994; Rollins, Bruening, & Radhakrishna, 1991; Suvedi, Campo, & Lapinski, 1999; Trede & Whitaker, 1998; Vergott III, Israel, & Mayo, 2005).

However, limited financial resources may force Extension educators to choose among communication channels. In such cases, understanding the target audience, including the methods by which they prefer to receive information, allows educators to select communication channels accordingly and to transfer information efficiently (Bouare & Bowen, 1990; Radhakrishna, Nelson, Franklin, & Kessler, 2003; Richardson & Mustian, 1994; Riesenber & Gor, 1989; Rollins, 1993).

Purpose and Objective

The overall research goal and purpose of the study reported here was to determine the agricultural information preferences of crop producers in Iowa and to assess the implications for agricultural Extension education. The objective of the study was to identify the types of communication channels that producers prefer to use to obtain agricultural information.

Methods and Procedures

The study consisted of five focus groups held in December 2004 in five communities throughout Iowa. Focus groups are guided interactive group discussions designed to gather perceptions, opinions, and ideas from participants about a defined area of interest in a friendly, non-threatening environment (Litosseliti, 2003; Morgan, 1998a; Morgan & Krueger, 1993). Focus group size ranged from three to nine participants; in total, 29 producers participated in the study. Eight to 12 producers in each group were confirmed for participation. Expert recommendations vary, but generally a focus group consists of six to 12 people per discussion session, and includes three to five sessions (Gamon, 1992; Grudens-Schuck, Allen, & Larson, 2004; Litosseliti, 2003; Morgan, 1998b).

Composing a group of people with similar characteristics enhances the quality of focus group data because people tend to disclose more to others they perceive as similar to themselves (Grudens-Schuck et al., 2004; Litosseliti, 2003). To attain this, participants were selected based on recommendations from Iowa State University Extension Field Crop Specialists. The Field Crop Specialists were asked to provide a convenience sample of producers they thought were users of agricultural information, would actively participate in the study, and conducted similar farming operations. A total of 115 producers were recommended for the study and were contacted by the researcher to determine their interest in participating. Participants in the focus groups were Caucasian males who farmed corn and soybeans, with ages ranging from late twenties to early sixties.

Only the participants and the researcher were present during each focus group. The researcher served as both moderator and recorder, which Morgan and Krueger (1993) indicate as acceptable, and in some cases preferable. In addition to following published focus group procedures, the researcher participated in two workshops prior to conducting the research to gain a greater understanding of conducting focus groups and analyzing the resulting data (Boone & Doerfert, 2003; Miller, 2004). Focus group sessions were limited to 90 minutes, as experts recommend (Grudens-Schuck et al., 2004; Morgan, 1998b). Participants were provided with a meal following or preceding the focus group session and were also given a small incentive gift, a coffee mug, for participating.

A discussion plan was created prior to the focus groups. As suggested by focus group experts, questions were written to be open-ended and nonbiased, and the question sequence progressed from general and unstructured to specific, and from greater to lesser importance (Gamon, 1992; Grudens-Schuck et al., 2004; Krueger, 1993, 1998a, 1998b). Questions were reviewed by an experienced focus group moderator and research analyst and altered according to her recommendations (N. Grudens-Schuck, personal communication, Nov. 18, 2004).

Focus group discussions began with introductions followed by an explanation of discussion rules and expectations, including information about voluntary participation and confidentiality. Participants were able to self-define communication channel terms according to their popular usage, so discussion would not be limited to terms introduced by the moderator. The researcher coded similar communication channels together from across all focus groups to make conclusions. (The complete question route is available on request from the lead author.)

Focus group data consisted of transcriptions of audio tapes and moderator notes, as Krueger recommends (1998a). Following published focus group procedures, data analysis was performed through theme coding and qualitative data charts, rather than quantitative methods (Grudens-Schuck et al., 2004; Krueger, 1998a; Litosseliti, 2003). A theme was considered valid when mentioned by two or more focus groups (Nordstrom, Wilson, Kelsey, Maretzki, & Pitts, 2000). One participant from each group reviewed discussion summaries to check for accuracy, as Krueger suggests (1998a). No discrepancies were noted.

Results

The results of the study indicate producers preferred to obtain agricultural information through personal consultations to all other communication methods. Producers liked consultations because they provide reliable, timely, and local information specific to their operation and problems. In general, producers preferred communication channels that were quick to access and easy to use and provided information specific to their operations. Participants were not asked to rank communication channels numerically, but rather to compare and contrast their use of individual channels. Collective preference of participants was determined by the researcher based on interpretation of all participant comments. Illustrative comments organized according to participant preferences are listed in Tables 1-3.

Table 1.
Thematic Conceptual Matrix of Farmers' Preference Towards Communication Methods

Preference	Preference Comparison	Illustrative Quotes (selected from all focus group sessions)
Consultations	Preferred the most over all communication	"The most reliable information would be consultation because you get specific answers, when you want

	methods	them." "John (Extension specialist) is taking all that info from the left-hand side of the media and separating all the BS from the good stuff and telling you what you need to know - kind of filtering it out." "I think all of them (farmers) are consultants in their own right... they say something to neighbors, discuss news, and it grows from there."
No preference between interpersonal and media	Rely on media for majority of information, but on interpersonal for detailed, local, or farm-specific information	"Mass media first off then if you want the specifics... you go to interpersonal either meetings or consultations." "With interpersonal you're out there with the person (looking) for solutions to your own situation." "The media alert you to a potential problem then you bring it down to the interpersonal."

Table 2.

Thematic Conceptual Matrix of Farmers' Preference Towards Mass Media Communication Methods

Preference	Preference Comparison	Illustrative Quotes (selected from all focus group sessions)
Radio	Preferred the most	"Radio is more timely." "If I listen to the radio that day I don't even need to open the newspaper."
Magazines	Varied	"Magazines are better because of the lack of in-depth information in the paper." "Magazine is more in-depth, but isn't time sensitive."
Internet	Varied	"Internet is better than TV without a doubt." "The best thing about Internet is you can go in and get it when you want it." "I can choose what topic I want to read."
Newspapers	Varied	"I'm not a big fan of the big papers like the Des Moines Register and some of those papers... they may have an article or two occasionally. I find farm news type publications a lot more beneficial." "Even if you're busy in the field there are publications like Iowa Farmer Today or Farm News you'll make time for."
Television	Preferred the least	"You've got to be quick to catch any ag information on TV unless there's a mad cow staggering around... only negative ag info makes it to TV." "For quick information television is better." "But there aren't too many farm programs on TV."

Table 3.

Thematic Conceptual Matrix of Farmers' Preference Towards Interpersonal Communication Methods

Preference	Preference Comparison	Illustrative Quotes (selected from all focus group sessions)
Consultations	Preferred the most	"I like to use consultations more because you get more specific info to what you're looking for instead of sitting all afternoon in a meeting." "They're a two-way street."

Demonstrations	Generally preferred the second most	"It (a demonstration) would definitely be better than a meeting or a workshop - anytime you can see it in action you're a lot better off."
		"If you're in the market to buy something, or you're looking for something to acquire a demonstration is best."
Meetings	Generally preferred next to least	"I would get more general information of out of a meeting than a workshop."
		"I'd go to ten meetings before I'd go to a workshop."
Workshops	Generally preferred the least	"I wouldn't go to a workshop - I just don't have that kind of time."
		"If we'd have to learn more details or dwell on it more then I would probably get something out of a workshop."

Producers did not indicate a preference between the general categories of interpersonal and mass media communication channels. However, they said they receive the bulk of their information from mass media, but rely on interpersonal communication for detailed, local, and farm-specific information. Producers said they believed interpersonal communication was more reliable than information from mass media. Overall, producers perceived interpersonal communication as a way to evaluate the quality of information and determine how or if it applies to their operations.

Within mass media communication channels, producers preferred radio the most because it is "more timely." They also said radio was easy to use, provided local information, and was accessible while they were doing other things. They especially preferred it during busy farming seasons.

Producers ranked television as their least preferred mass media communication channel. Many felt there were few opportunities to view agricultural programs and when agriculture was on television the industry was often portrayed negatively.

Producers discussed numerous other mass media channels they preferred, including magazines, the Internet, and newspapers, but a clear ranking did not surface among them. Magazines tended to be preferred for in-depth information, especially for photographs and charts. Producers also said they liked the advertisements, but they did not see magazines as a source of timely information.

The producers who preferred the Internet cited the timeliness of the information as a major factor. However, many producers did not prefer the Internet because of slow dial-up connections, the time necessary to access the information, and the need to devote their attention solely to getting the information. Almost all producers in the study were using Data Transmission Networks (DTN) to some degree, though many were accessing the DTN information through Web sites. Some said they preferred a DTN machine to other methods because it had a familiar interface that does not change, was accessible when the family computer was in use, and did not require a phone line. Those who preferred DTN believe it is quicker than the Internet.

Consultations were the most preferred communication channel and the method producers preferred among interpersonal communication channels. Demonstrations were preferred next, followed by meetings, and then by workshops. Demonstrations were especially preferred for situations where visually comparing products or practices was important to the message. Meetings were less preferred because of the perceived broad nature of information presented and the amount of time required to attend.

For the purpose of coding participant responses and making conclusions in the study, a workshop was considered longer than 2 hours with a participatory function; a meeting was 2 hours or less in length and conducted in lecture or presentation format; and a demonstration was a demonstration of new practice or technology, often outdoors, such as a field day or farm show.

Conclusions and Implications

The results of the study illustrate the following conclusions:

1. Rather than acquiring information from Extension, producers look to Extension personnel for assistance in evaluating information gathered from other sources;
2. Producers identified they use a variety of communication channels;
3. Among communication channels, producers indicated a preference for consultations;

4. Producers indicated a preference for mass media channels for general information and interpersonal communication channels for specific and applicable information;
5. Among mass media channels, producers indicated a preference for radio; and
6. Among interpersonal channels, producers indicated a preference for consultations.

The findings from the study provided insight into Iowa corn and soybean producers' preferences regarding interpersonal versus mass media communication channels. Participants indicated mass media and interpersonal communication channels were preferred for different types of information, while previous studies concluded producers preferred interpersonal communication methods to mass media methods overall (Bruening et al., 1992; Israel, 1991; Lasley et al., 2001; Riesenberg & Gor, 1989; Rollins et al., 1991; Suvedi, Lapinski, & Campo, 2000; Vergott III et al., 2005). The results reaffirm the findings of previous studies that established producers preferred a variety of communication methods (Bruening et al., 1992; Dollisso & Martin, 1999; Kotile & Martin, 2000; Lasley et al., 2001; Richardson & Mustian, 1994; Rollins et al., 1991; Suvedi et al., 1999; Trede & Whitaker, 1998).

Producers' preferences for consultations indicated in the study were consistent with that of previous literature that found consultations were highly rated (Bruening et al., 1992; Israel, 1991; Rollins et al., 1991; Suvedi et al., 2000; Vergott III et al., 2005). Other specific findings, such as the preference for radio within mass media methods and the use of the Internet as supplemental communication, were in accordance with previous literature (Lasley et al., 2001; Nelson & Trede, 2004; Richardson & Mustian, 1994; Suvedi et al., 1999; Trede & Whitaker, 1998).

These results of the study are especially significant in that they reveal a burgeoning role played by agricultural Extension educators: that of an information filter for producers. Since producers consider interpersonal communication methods more reliable, even though they used mass media methods more often, Extension educators have the opportunity to influence producers more significantly than mass media. This role is especially important as producers receive an increasing amount of information through an increasing variety of methods. Extension educators could grow in their "information-filtering" role to assist producers in reaching greater understanding of agriculture information presented in mass media in order to better their farm operation and way of life.

Although the results of the study cannot be widely generalized, Extension educators may find them transferable to other similar situations and groups through Krueger's concept of transferability, which is, "parallel to the positivistic concept of generalizability, except that it is the receiver who decides if the results can be applied to the next situation, rather than the sender or researcher" (1998a, p.70). Extension educators may find the results of the study are especially transferable in selecting communication methods to deliver educational programs to Iowa corn and soybean producers. Those with limited resources who must choose among communication channels rather than use a combination of methods may also find the data especially useful. The research provides an introduction to communication channel use that would be helpful for those new to Extension or for use in agricultural education classrooms.

Future research is needed on a broad scale to assess the communication channel preferences of Iowa producers. In order to allow for generalization, the data could be gathered from a random sample of Iowa producers using large-scale survey research methods. The data from the study presented here could serve as a resource for selecting objectives and designing questions for such a survey.

Acknowledgment

This article is a product of the Iowa Agriculture and Home Economics Experiment Station, Ames Iowa. Project #3613 and sponsored by Hatch Act and State of Iowa Funds.

References

- Bouare, D., & Bowen, B. E. (1990). Formal and nonformal instruction delivered to producers by adult instructors, secondary agriculture teachers, and extension agents. *Journal of Agricultural Education, 31*, 68-73.
- Bruening, T., Radhakrishna, R., & Rollins, T. (1992). Environmental issues: producers' perceptions about usefulness of information and organizational sources. *Journal of Agricultural Education, 31*, 34-42.
- Dollisso, A. D., & Martin, R. A. (1999). Perceptions regarding adult learners' motivation to participate in educational programs. *Journal of Agricultural Education, 40*(4), 38-46.
- Grudens-Schuck, N., Allen, B. L., & Larson, K. (2004). Focus group fundamentals (Extension Publication PM 1969b): Iowa State University Extension.

- Israel, G. (1991). Reaching Extension's clientele: Exploring patterns of preferred information channels among small farm operators. *Southern Rural Sociology*, 8.
- Kotile, D. G., & Martin, R. A. (2000). Sustainable agricultural practices for weed management: implications to agricultural extension education. *Journal of Sustainable Agriculture*, 16(2), 31-51.
- Krueger, R. A. (1993). Quality control in focus group research. In D. L. Morgan (Ed.), *Successful focus groups: advancing the state of the art*. Newbury, London, New Delhi: Sage Publications, Inc.
- Krueger, R. A. (1998a). *Analyzing & reporting focus group results* (Vol. VI). Thousand Oaks, London, New Delhi: Sage Publications, Inc.
- Krueger, R. A. (1998b). *Developing questions for focus groups* (Vol. III). Thousand Oaks, London, New Delhi: Sage Publications, Inc.
- Krueger, R. A. (1998c). *Moderating focus groups* (Vol. IV). Thousand Oaks, London, New Delhi: Sage Publications, Inc.
- Langer, J. (2001). *The mirrored window: focus groups from a moderator's point of view*. New York: Roper Starch Worldwide.
- Lasley, P., Padgitt, S., & Hanson, M. (2001). Telecommunication technology and its implications for producers and extension services. *Technology in Society*, 23, 109-120.
- Litosseliti, L. (2003). *Using focus groups in research*. London, New York: Continuum.
- Morgan, D. L. (1998a). *The focus group guidebook* (Vol. I). Thousand Oaks, London, New Delhi: Sage Publications, Inc.
- Morgan, D. L. (1998b). *Planning focus groups* (Vol. II). Thousand Oaks, London, New Delhi: Sage Publications, Inc.
- Nelson, D. R., & Trede, L. D. (2004). Educational needs of beginning producers as perceived by Iowa extension professional staff. *Journal of Extension* [On-line], 42(1), Available at: <http://joe.org/joe/2004february/rb2.shtml>
- Radhakrishna, R., Nelson, L., Franklin, R., & Kessler, G. (2003). Information sources and extension delivery methods used by private longleaf pine landowners. *Journal of Extension* [On-line], 41(4), Available at: <http://www.joe.org/joe/2003august/rb3.shtml>
- Richardson, J. G., & Mustian, R. D. (1994). Delivery methods preferred by targeted extension clientele for receiving specific information. *Journal of Applied Communications*, 78(1), 22-32.
- Riesenberg, L. E., & Gor, C. O. (1989). Producers' preferences for methods of receiving information on new or innovative farming practices. *Journal of Agricultural Education*, 30, 7-13.
- Rollins, T. (1993). Using the innovation adoption diffusion model to target educational programming. *Journal of Agricultural Education*, 34, 46-54.
- Rollins, T., Bruening, T., & Radhakrishna, R. (1991). Identifying extension information delivery methods for environmental issues. *Journal of Applied Communications*, 75(2), 1-9.
- Suvedi, M., Campo, S., & Lapinski, M. K. (1999). Trends in Michigan producers' information seeking behaviors and perspectives on the delivery of information. *Journal of Applied Communications*, 83(3), 33-50.
- Suvedi, M., Lapinski, M. K., & Campo, S. (2000). Producers' perspectives of Michigan State University Extension: trends and lessons from 1996 and 1999. *Journal of Extension* [On-line], 38(1), Available at: <http://www.joe.org/joe/2000february/a4.html>
- Trede, L. D., & Whitaker, S. (1998). Perceptions of Iowa beginning producers toward the delivery of education. *Journal of Applied Communications*, 82(4), 22-33.
- Vergott III, P., Israel, G., & Mayo, D. E. (2005). Sources and channels of information used by beef cattle producers in 12 counties of the Northwest Florida Extension District. *Journal of Extension* [On-line], 43(2), Available at: <http://www.joe.org/joe/2005april/rb6.shtml>

Copyright © by Extension Journal, Inc. ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the [Journal Editorial Office, joe-ed@joe.org](mailto:joe-ed@joe.org).

If you have difficulties viewing or printing this page, please contact [JOE Technical Support](#)

