

CHANNELS AND SOURCES USED TO GATHER EQUINE-RELATED
INFORMATION BY COLLEGE-AGE HORSE OWNERS AND ENTHUSIASTS

A Thesis

by

ERIN ALENE SULLIVAN

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

December 2008

Major Subject: Agricultural Education

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ABSTRACT

Channels and Sources Used to Gather Equine-related Information by College-age Horse Owners and Enthusiasts. (December 2008)

Erin Alene Sullivan, B.A., Texas A&M University

Chair of Advisory Committee: Dr. Tracy Rutherford

This thesis identifies the equine-related topics that are important to Texas college-age horse owners and enthusiasts and the channels/sources they use to get equine-related information. Little research has focused on this group to determine their information needs. Therefore, two focus groups were conducted in 2008 in Texas with college-age horse owners and enthusiasts to conduct a needs assessment. Participants were separated into competitive and recreational groups depending on their level of participation in the industry. They were asked what topics they consider important and what channels/sources they use to gain desired information. Training was the most mentioned topic overall, and the most mentioned by recreational participants. Alternative medical treatments was the most mentioned topic by competitive participants. Competitive participants reported a smaller number of topics as important, indicating that they have specialized information needs. Recreational participants emphasized broader, less specialized topics. Participants showed an interest in relevant and controversial topics affecting the equine industry. Participants also used a combination of channels/sources and competitive and recreational participants often

placed importance on different channels/sources. Face-to-face communication was important to both groups. Magazines were important to competitive participants, while the Internet was important to recreational participants. Competitive participants doubted the trustworthiness of sources available through the Internet, but wanted more reliable sources to be made available in the future. Participants preferred to get information from industry specialist sources, such as trainers, veterinarians, other owners and enthusiasts, breed associations, and equine magazines. Participants' perceptions of trustworthiness were affected by the source's ability to demonstrate equine-specific knowledge and the source's reputation and success among equine industry members. The results suggests that the influence of the Internet has altered the traditional models of communication in which source selection determines channel use. In this study, the participants' Internet channel selection often determined their source use. The results also suggests that communicators wanting to reach this audience should target specific topics to competitive and recreational audiences, use a multi-channel approach, establish trustworthiness, and explore the changing role of the Internet in agricultural communication.

DEDICATION

This thesis is dedicated to all the horses that have impacted my life: the ponies that first walked me in circles at backyard birthday parties, the gentle old-timers that carried me through my first lessons, the steady mare who soared with me over my first fence, the powerful gelding who sent me flying and taught me about respect, and of course, my independent spirit, my stubborn but faithful, my clever, keen-eyed Stetson.

When I bestride him, I soar, I am a hawk: he trots the air; the earth sings when he touches it; the basest horn of his hoof is more musical than the pipe of Hermes.

~William Shakespeare, *Henry V*

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More thanks than I could ever express is owed to my parents, who shuttled me to horseback riding lessons, financed my interest in horses, provided me with my education, and most importantly, encouraged me to write. Thank you to my sister and Amanda for teaching me much of what I know about horses.

I also owe thanks to Tanner, for being interested in what interests me, supporting me, encouraging me, and making me be my best.

NOMENCLATURE

Extension:	Cooperative Extension Service
College-age:	Individuals between 18 and 25
Channels:	Mediums through which information is communicated
Horse owners:	Persons owning one or more horses
Horse enthusiasts:	Persons not owning horses, but who are actively involved in the equine industry
Sources:	Organizations and individuals who provide information

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CHAPTER I

INTRODUCTION

Groups desiring to communicate with agricultural industry members have a vested interest in knowing the channels and sources industry members use and why they use them. The foremost of these groups has been Extension, who communicates educational messages with its clients. Just as agricultural industry members make choices about how they access information, groups like Extension make choices about how they disseminate information. Knowing the channels and sources that clients use allows communicators to have a better understanding of how to deliver messages to their clients.

Review of the Literature

The agricultural industry is diverse, as are its members. Looking at the variety of Cooperative Extension Service (Extension) clients, which ranges from producers, to homemakers, to gardeners, and horse owners, it is evident that industry members have unique characteristics. This diversity means that members of the agricultural industry have a wide variety of information needs specific to their interests.

Industry members determine the topics that are important to them. They also decide how to get information on those topics. When industry members access agricultural information, they make choices about the methods they use to get information, and whom they want to get information from. When industry members make these choices, they select *channels* and *sources*.

This thesis follows the style of the *Journal of Applied Communications*.

Channels and Sources

The study of channels and sources used in agriculture is informed by theoretical perspectives on communication. These classical communication theories are the foundation to understanding channels and sources and how they function in the communication process.

While attempting to improve telephone communication, Shannon and Weaver (1949) developed a linear model for communication (see Figure 1). In their model, Shannon and Weaver included five aspects: the information source, the transmitter, the noise source, the receiver, and the destination. Communication starts at the left side of the model with the source, and moves to the right until it is received at the destination. In the Shannon and Weaver model, the source is an entity that “selects a desired message out of a set of possible messages” (p. 7). A transmitter changes the source’s message into a signal, and the signal is sent through the channel to the receiver. Shannon and Weaver stated, “the capacity of a channel is to be described in terms of its ability to transmit what is produced out of a source of given information” (p. 16).

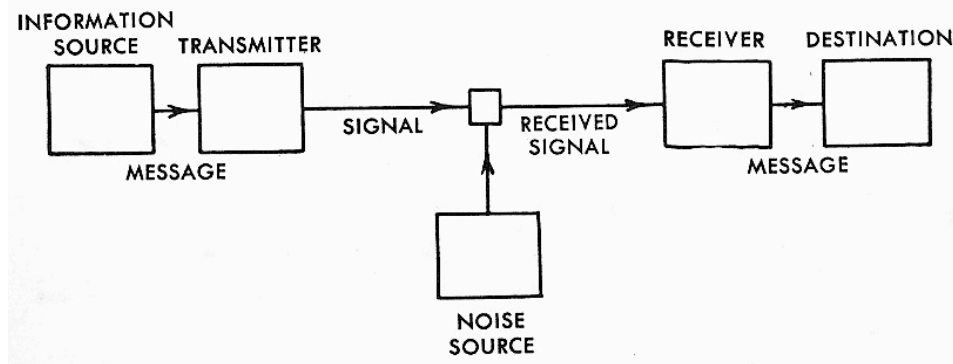


Figure 1. *Shannon and Weaver Model of Communication.* Note. From *The Mathematical Theory of Communication* (p. 7), by C. E. Shannon and W. Weaver, 1949, Urbana: University of Illinois Press. Reprinted with permission from the University of Illinois Press.

Schramm (1954) criticized the linear Shannon and Weaver (1949) model and developed an alternative model demonstrating the circular nature of communication (see Figure 2). Schramm argued that the communication process does not have a start and an end, but is constant and ongoing. The Schramm model shows the nature of direct face-to-face communication by depicting how sources and receivers constantly and simultaneously send each other signals and messages during the communication process. During the face-to-face communication process, receivers have an opportunity to manipulate communication exchange by providing “feedback” (p. 9). The receiver can provide feedback through verbal or physical signals and messages. They can ask the source questions, redirect the topic of discussion, frown, smile, or do any number of other things to affect the process. Receivers have the opportunity to affect the information process when accessing information through other methods, however the effect is more immediate and evident when face-to-face communication is taking place.

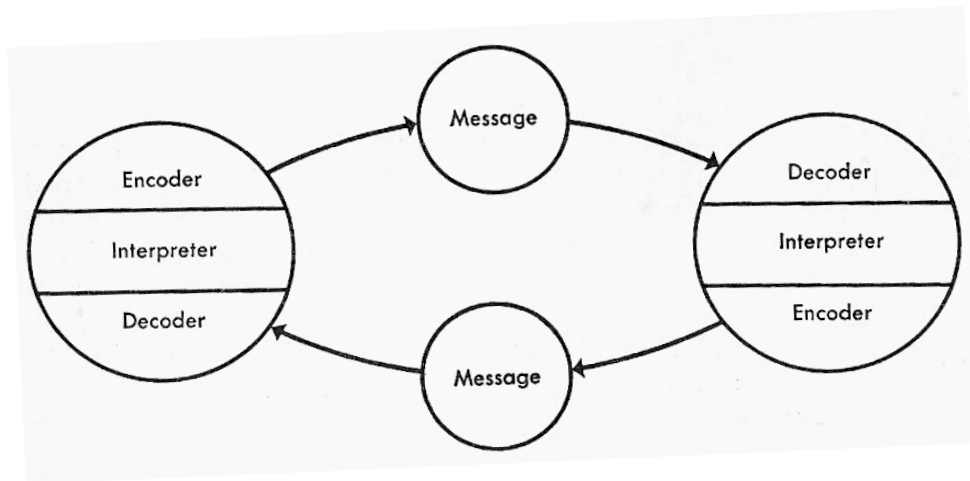


Figure 2. *Schramm Model of Communication.* Note. From “How Communication Works,” by W. Schramm in *The Process and Effects of Mass Communication* (p. 8), Urbana: University of Illinois Press. Reprinted with permission from Mary Schramm Coberly.

Heath and Bryant (2000) posited that one of the most impacting books on communication theory was Berlo’s *The Process of Communication: An Introduction to Theory and Practice*, published in 1960. Heath and Bryant wrote that Berlo “popularized the notion that communication is a process and offered an enduring model” (p. 61). The model, an evolution of the previous communication models, is the S-M-C-R model: source-message-channel-receiver (see Figure 3).

According to Berlo (1960), the source is a “person or group of persons with a purpose, a reason for engaging in communication” (p. 30). The message is a translation of the “ideas, purposes, and intentions” (p. 30) of the source into a code, or language. The way the message becomes coded is through an encoder. In some circumstances, the encoder and the source are the same. For example, when someone speaks and shares their message, they act as the source of the message, and they act as the encoder as their

vocal chords translate the message in a code. The encoder can also be separate from the source. Berlo provided the example of a salesman who encodes the message of the sales manager to the consumer. A modern example is a Web site designer who codes the message of a client into the various elements of a Web page to be viewed by the public.

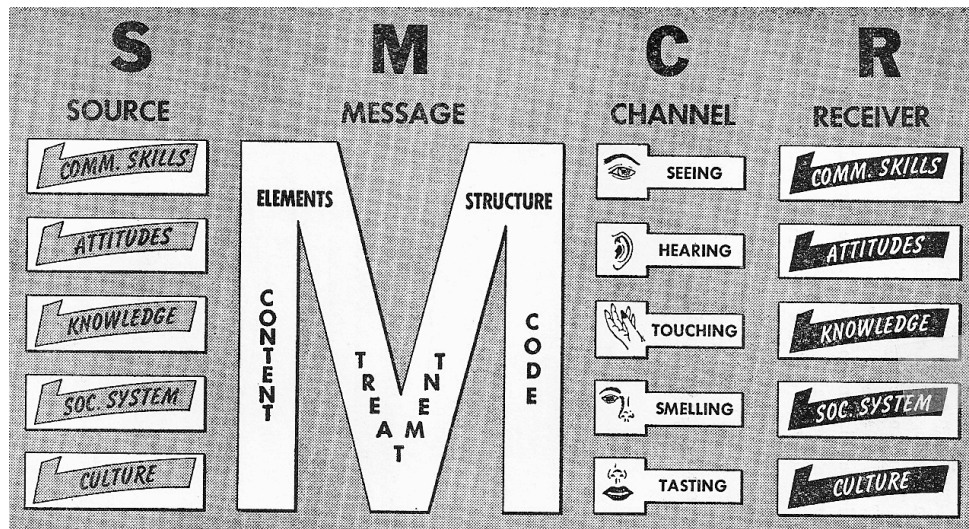


Figure 3. Berlo Model of Communication. Note From *The Process of Communication* by David K. Berlo. Copyright © 1960 Holt, Rinehart and Winston. All rights reserved. Reprinted by permission of Holt Littell, a division of Houghton Mifflin Harcourt Publishing Company.

In this model, the channel receives due emphasis as a vital part of the communication process. A channel must exist for the message to be communicated. The channel is the medium that carries the message from the source to the receiver. Berlo wrote, “the choice of channel often is an important factor in the effectiveness of communication” (p. 31). The model shows that different channels have the ability to communicate in different ways. A magazine involves seeing and, in a limited sense,

touching. A streaming video on a Web site involves seeing and hearing. Each can have a different effect on the receiver.

The receiver is the person who receives the message from the source, through the channel. In Berlo's (1960) model, both the source and receiver are affected by their "(a) communications skills, (b) attitudes, (c) knowledge level, and (d) position within a social-cultural system" (p. 41). These factors affect the source's message and the way the source communicates its message, as well as the way the receiver receives and interprets the message. The receiver can also evaluate the source based on these factors to decide if they want to trust the source's message.

Berlo (1960) also makes a key assertion: The linear representation of the model does not imply that the communication process has a beginning and end. Berlo acknowledges that all sources have at one time been receivers, and vice versa. Messages move from a source to a receiver, are re-interpreted, and then move on again to a new receiver. The linear model, however, is a representation that makes it easy to talk about the communication process and to examine the different elements. Berlo also asserts that although it may appear so in the physical representation of the model, different parts of the model are not independent functions. The communication process is interactive and dynamic, with different parts constantly affecting the others. However, it is helpful to analyze the parts on their own and look at their unique characteristics to better understand how they work in the dynamic communication process.

Through the Berlo (1960) model, the receiver sometimes has a choice between different channels and sources. The receiver may use a single channel to choose between

different sources. In some instances, information from a single source might be available through different channels, and the receiver can choose which channel, or combination of channels, to use. In other instances, the receiver might be looking for information about a specific topic, and the information from a certain source might be available through only one channel, forcing the receiver to look at the two as a packaged bundle. In few instances, information on a topic might only be available from one source through one channel. Any combination of receiver choices can exist depending on the situation, and the choices the receiver makes are affected by many factors, some of which Berlo has identified.

Channel and Source Use and Preference in Agriculture

While there is a substantial body of research on the use of and preference for channels and sources by agricultural industry members, much of the literature fails to distinguish between channels and sources. While the communication models show that channels and sources work together, it is also evident that they are distinct and not equivalent in definition. The primary weakness in interchanging the terms and failing to recognize their unique qualities is that it makes it difficult to analyze them as separate entities.

Practically speaking, sources are the organizations and individuals who provide information, and channels are the mediums through which information is communicated. Tucker and Napier (2002) stated that “sources provide the content or expertise of interest to the information seeker, while channels refer.

Tucker and Napier (2002) and Israel and Wilson (2006) recognized this fault in the body of literature and analyzed both the channel and source use of Extension clients. This study also identifies *both* the channels and sources use of Texas college-age horse owners and enthusiasts, and analyzes them as distinct entities. How channels and sources interact and relate to each other is important, but to understand this dynamic relationship the individual parts must be understood as well. This study attempts to continue the trend set by Tucker and Napier, and Israel and Wilson, of correctly identifying the components of the process in agricultural communication. This is important so that studies in agricultural communication and their findings can be compared more accurately and effectively.

While the agricultural industry is composed of many groups involved at different levels and fulfilling different roles, the traditional customer for Extension has been food and fiber producers, and research about information exchange in agriculture has overwhelmingly focused on the channels and/or sources used and preferred by these clients when accessing a variety of agricultural information. Primarily, Extension has been interested in knowing how their clients get information so that they can better serve, educate, and inform them.

Batte, Schnitkey, and Jones (1990) investigated the sources used by Midwestern cash grain producers accessing marketing information and found that radio broadcasts and magazines were the most used channels. Batte et al. chose to look at marketing information sources because marketing decisions were identified as important to Midwestern producers, who have a great deal of leeway when deciding which

combination of crops to produce each year. Schnitkey, Batte, Jones, and Botomogno (1992) also researched producer preferences for getting information about marketing decisions, in addition to production and financial decisions. The researchers found that Ohio commercial producers preferred printed information channels. For other business management decisions, Ford and Babb (1989) found that producers in the southeast United States preferred face-to-face, “service oriented” (p. 473) communication.

For getting information about environmental issues, Bruening (1991) reported that Iowa producers considered local meetings, field demonstrations, and printed materials to be the most useful channels. The most useful sources were Extension, the Soil Conservation Service, and local dealers of seed, chemicals, and fertilizers. Bruening cited the importance of Extension issues-based programming and the need to investigate the type of communication methods needed to deliver issue-specific information to producers. Previous research had identified that environmental issues were important to Iowa producers, however Bruening reported that little was known about the producers’ perceptions on communication about environmental issues. Lichtenberg and Zimmerman (1999) surveyed Mid-Atlantic producers about information sources on pesticide-related environmental issues and found that the producers used information that was accessed on a firsthand basis through channels such as direct field observation and pesticide labels. For soil conservation information, Gamon, Bounaga, and Miller (1992) found that Iowa producers of highly erodible fields preferred neighbors and family members as sources.

Carter and Batte (1994) found that printed media was the most preferred channel for Ohio producers getting Extension information, while Richardson (1989) and Richardson and Mustian (1994) looked at channels used by North Carolina producers and found that they preferred face-to-face, interactive communication.

Trede and Whitaker (1998) surveyed Iowa beginning producers and determined that they needed beginning producer education. The new Iowa producers reported that they preferred on-site instruction, meetings, and community education to get the educational information. Reisenberg and Gor (1989) found that Idaho producers preferred on-farm demonstrations, tours, and field trips when they were getting information about new farming practices. The researchers asserted that possessing information about innovative farming technologies could mean the difference between survival and failure for a producer.

The research has shown that producers in different regions and producing different food and fiber commodities use a variety of channels and sources to access information about issues that are of interest and are important to them. Before research can be conducted to determine the channels and sources an audience uses to get information about important topics, the topics that are important to the audience must be determined. While research has identified many of the topics that are important to many groups of producers, little is known about the topics that livestock owners and producers consider important.

Few studies were found describing the information needs of livestock producers, as opposed to crop producers. Amponsah (1995); Jones, Batte, and Schmitkey (1989);

Suvedi, Campo, and Lapinski (1999); Tavernier, Adelaja, Hartley, and Schilling (1996); and Tucker and Napier (2002) surveyed a combination of crop and livestock producers in the United States about their preferred methods for getting agricultural information. Those livestock producers were part of larger survey samples that also included crop producers.

To determine Extension agents' assessments of different channels, Obahayujie and Hillison (1988) surveyed Virginia beef producers. The researchers found that part-time producers preferred face-to-face communication while full-time producers preferred mass contact methods. Brashear, Hollis, and Wheeler (2000) surveyed Illinois swine producers to determine how they became informed about new technologies. The swine producers reported using industry publications and feed company representative most frequently.

These studies of livestock producers were conducted using questionnaires and surveys to discover the information gathering habits of each audience regarding topics that were determined to be important to them. However, Alfaro (2004) described the information sources used and education delivery methods preferred by Honduras dairy producers by conducting structured interviews. Lazenby (2005) used surveys, interviews, and research observations to collect descriptive information about livestock producers in Mexico and the channels they used and preferred for getting information about ranching practices. Descriptive research was needed because generalizations drawn from previous research on American producers would not be sufficient for these unique groups.

Other groups who are not producers of food and fiber, but are Extension clients, have also been included in the literature on channel and source use and preference in a more limited scope. One such group, homemakers, was studied by Boone and Zenger (2001) using focus groups to gather descriptive, qualitative results. Boone and Zenger believed that research had not determined the information needs of homemakers, who as a group had changed drastically in recent decades.

Despite the unique needs of different groups in the agricultural industry, some generalizations about channel and source use and preference have been made. Studies have shown that agricultural audiences often use more than one channel or source to get information. Israel (1991) and Lasley, Padgitt, and Hanson (2001) found that producers wanted Extension information to be available through a wide variety of channels. Patrick and Ullerich (1996) found that agricultural bankers, farm managers, and large-scale producers used multiple sources depending on the type of decision they are making. Licht and Martin (2006) found that the best way to communicate with Iowa corn and soybean producers was through multiple channels. Caldwell and Richardson (1995) found that when being contacted by non face-to-face methods, North Carolina producers preferred to be reached by a combination of channels.

Research has also shown that producers often prefer face-to-face communication. Rollins, Bruening, and Radhakrishna (1991) found that activities such as on-farm consultations, demonstrations, and tours were Pennsylvania producers most preferred channels for receiving environmental information. Bruening (1991), Carter and Batte (1994), Ford and Babb (1989), Gamon et al. (1992), Lanzeby (2005), Lasley et al.

(2001), Obahayujie and Hillison (1988), Reisenberg (1989), Richardson and Mustian (1994), Trede and Whitaker (1998), and Tavernier et al. (1996) also found that producers preferred interactive, face-to-face information delivery.

Although face-to-face communication has remained a consistently used method for agricultural audiences, the literature has also shown that different groups use and prefer different channels and sources, and they desire channels and sources that are specifically tailored to meet their needs. When North Carolina Extension agents interviewed producers about their preferred delivery methods for Extension information (Richardson & Mustian, 1994), the producers expressed that they desired methods that provided “subject and audience specificity” (p. 26). Richardson and Mustian concluded that a delivery method’s “relevancy and specificity” (p. 26) to meeting clientele needs was the greatest factor affecting client preference. In their study on the preferred channels of homemakers, Boone and Zenger (2001) concluded that it was important to “target information to specific groups using a variety of channels” (p. 25). Israel (1991) also found that it was important to match information channels to the preferences of the audience. Tucker and Napier (2002) emphasized that communicators should not use blanketing approaches when trying to reach producers, but should target specific messages to specific audiences.

Horse owners and enthusiasts are a specific audience that has had little attention in previous research. There has been a small segment of literature addressing the channel and source use and preference of persons involved with horses. Tavernier et al. (1996) included horse farm enterprises in their survey of New Jersey producers’ preferred

methods for getting farm-related information. However, only 4 % of their survey sample was livestock producers whose commodity was horses. Eighty-nine percent of those horse producers preferred to receive Extension information through “direct communications with specialists/agricultural agents, farm supply and equipment vendors, and representatives from lending institutions,” 11% preferred “print media such as farm newspapers, trade journals, [and] agricultural newsletters,” and none preferred “equipment and machines, which include facsimile machines, computers, modems, VCRs, [and] telephones” or “broadcast media which include radio, commercial and cable television” (pp. 76-77). Israel and Wilson (2006) surveyed Florida horse owners to determine the channels and sources they used to get information about horses. The researchers found that horse owners frequently used veterinarians, farriers, other horse owners, and trainers as information sources, and that they seldom use Extension agents, private consultants, or relatives. The channel horse owners used most frequently was equine magazines. Less frequently used channels were newspapers, Web sites, and field days.

While these studies investigated persons involved with horses, the research techniques failed to address that horse owners and enthusiasts are a group with unique information needs. Before researchers can conduct larger scale quantitative investigations into the channels and sources used by groups of horse owners and enthusiasts, a greater understanding must be developed about the audience’s unique needs, interests, and practices. To help future researchers build accurate quantitative instruments for further study that are specifically tailored to this audience, this study

seeks to describe the topics that are important to horse owners and enthusiasts and to identify a bank of channels and sources they use.

The Equine Industry in Texas

Texas has consistently been a leader in the United States equine industry. In a 1998 study, Gibbs et al. reported that Texas led the nation in the number of registered American Quarter Horses, American Paint Horses, Appaloosa Horses, and American Miniature Horses and was second in the nation in the number of registered Arabian Horses and Thoroughbred breeding stallions. A 2005 United States Department of Agriculture (USDA) review of changes in the equine industry between 1998 and 2005 reported that in 2002, Texas had the most horses and ponies and the most farms with horses and ponies in the United States. Additionally, a 2004 USDA Texas agricultural overview rated Texas as second in the U.S. in the sales of horses, ponies, mules, burros, and donkeys.

The information gathering habits of horse owners warrants further research because horse owners are different from the producers that have been the primary focus of channel and source research. While crop and livestock producers produce their commodities for consumption as food or for use as fiber or fuel, horse owners do not produce or maintain their livestock for these purposes; Texas prohibits the slaughter of horses for human consumption (Sale of Horsemeat for Human Consumption, 1991). Horse owners instead maintain horses for sport, recreation, competition, work, and other activities. A 2005 audit of the Texas equine industry by the American Horse Council Foundation (AHC) reported that the primary activities of horse owners in the state are

breeding, competing, service provider, and other activities, which can likely be assumed to include riding for recreation. The AHC also reported that the 979,000 horses in Texas participate in racing, showing, recreation, and other activities. In a separate audit of the Texas equine industry, Gibbs et al. (1998) reported that Texas horse owners use horses for the enjoyment of competition, improved quality of life, relaxation, value for their children, breeding, physical fitness, buying and selling for profit, and training for profit.

The Internet

Research has shown that agricultural audiences traditionally do not use or prefer technologically advanced information channels. In 1988, Obahayujie and Hillison found that beef producers ranked computer messages as one of the least effective methods for disseminating Extension information. Computer-assisted instruction received a low preference rating from Idaho producers receiving information about innovative farming practices (Riesenberg & Gor, 1989). Batte et al. (1990) reported that computerized information sources were not very useful to Midwestern grain producers. Carter and Batte (1994) reported that Ohio producers gave high-tech methods of communicating education programs low ratings. Amponsah (1995) found only a 14% adoption rate for computers by North Carolina commercial producers for use in their farm business. Tavernier et al. (1996) found that only 3% of crop producers and 6% of livestock producers indicated preferences for receiving farm-related information through equipment and machines (fax, computer, modem, VCR). Brashear et al. (2000) found that Internet and e-mail were among the least used communication channels for swine producers getting information about new technologies. In a 2002 study, Rexroad

reported that 30% of master gardeners surveyed in West Virginia had no access to Internet or e-mail. Tucker and Napier (2002) reported that producers in Midwestern watersheds did not prefer electronic or computer channels when getting information about soil and water conservation. Horse owners surveyed by Israel and Wilson (2006) infrequently used university Web sites and county Extension Web sites when getting horse information. Suvedi et al. (1999) reported that Michigan producers do not use Web-based information.

Even though producers have traditionally been hesitant to embrace new and innovative communication technology, some recent studies have shown that producers are beginning to do just that. Groups like Extension have recognized the potential of Internet-based channels and have begun to explore their benefits for communicating with CES audiences. As early as 1994, Richardson and Mustian reported that North Carolina producers had an interest in computerized methods of information delivery and wanted to stay in touch with new technologies. Lasley et al. (2001) found that producers wanted computer-assisted technologies to complement more traditional Extension communication methods. Denniston and Callahan (2005) investigated the effectiveness of a Web site for delivering 4-H horse project information to youth, parents, leaders, and CES staff. They found that “most users felt they were more in touch with the State Extension Office because of the website” (p. 33). Cavinder, Antilley, Gibbs, and Briers (in press) found that an online horse conformation evaluation page had a “positive effect in educating coaches in improving their overall knowledge of halter judging” (p. 8). Lazenby (2005) found that the Internet is a “highly influential source” (p. 215) for

livestock producers in the adoption of ranching practices. National agriculture journalists investigating agricultural biotechnology issues were reported by Wingenbach and Rutherford (2006) to often use the Internet. It is not surprising that groups like Extension should be interested in exploring online information channels as the Internet use has become more widespread. A United States Department of Commerce (USDC) (2004) report investigating the use of computers and the Internet found that from October 1997 to October 2003 the percentage of households with computers and Internet connections increased from 19% to 55%. In 2003, 59% of households surveyed reported being Internet users.

Much research has shown that age is one of the factors that can affect a producer's use of and preference for innovative communication technologies, such as the Internet, and that age and preference for high-tech information channels are often negatively related (Amponsah, 1995; Lazenby, 2005; Riesenberg & Gor, 1989; Suvedi et al., 1999). The USDC (2004) reported that a staggering 71% of the 18- to 24-year-olds surveyed identified themselves as Internet users, compared to 45% of 50-year-olds and older. However, in much of the previous research regarding information channel and source use, the mean age of the producers studied was 50 or older (Amponsah, 1995; Carter & Batte, 1994; Gamon et al., 1992; Israel, 1991; Licht & Martin, 2006; Rollins et al., 1991), or the majority of the producers studied were 50 or older (Riesenberg & Gor, 1989; Suvedi et al., 1999). This study targets a younger audience, college-age horse owners and enthusiasts, who might have a different view of the Internet and new communication technologies.

Purpose

The purpose of this research is to describe the equine-related information gathering habits of Texas college-age horse owners and enthusiasts. The objectives for this study include:

1. Identify equine-related topics that are important to Texas college-age horse owners and enthusiasts.
2. Describe the channels used by Texas college-age horse owners and enthusiasts to get equine-related information.
3. Describe the sources used by Texas college-age horse owners and enthusiasts to get equine-related information.

Methods

Research Design

The lack of research found exploring the information channels and sources used by horse owners drove the framework of this study toward a needs assessment approach. To assist communicators to reach college-age horse owners and enthusiasts, the owners' and enthusiasts' information needs should be determined. This way, communicators can ensure that they target appropriate messages through appropriate channels, therefore serving the community better (Nickens, Purga, & Noriega, 1980). Channel and source selection is an action that is embedded in horse owners' and enthusiasts' everyday-world situations. Whether consciously or subconsciously, anytime a horse owner or enthusiasts asks questions about horses, learns something new about horses, or seeks information about equine-related topics, they are making choices about channels and sources. This

study seeks to determine the topic college-age owners and enthusiasts need information on, and the channels and sources they use, enabling communicators to create effective communication strategies.

Giving audiences the opportunity to share their perceived needs helps parties, like educators and communicators, to avoid making poor decisions when designing programs and strategies for those audiences (Kaufman, 1975). Needs assessments involve targeted audiences in the planning process for plans and strategies that ultimately affect them. Kaufman's needs assessment model is a method for identifying gaps between current results and required or desired results, between what is and what should be or can be. Current communication strategies in agriculture are built for producers of food and fiber, not college-age horse owners and enthusiasts. By determining owners' and enthusiasts needs', new strategies can bridge the gap between ineffective and effective communication with this group. Kaufman wrote that frequent needs assessments give educators the ability to evaluate the changing needs of learner, helping educators to avoid becoming outdated and "archaic" (p. 114). The way the Internet is changing the landscape of agricultural communication suggests that new needs might have developed among agricultural industry members.

This study combined a community forum and survey approach to needs assessments (Nickens et al., 1980). A community forum needs assessment gathers participant's perceptions and experiences in order to identify their needs. Nickens et al. write that this approach "is based on input from individual perceptions" (p. 3) because individuals share their personal perspectives. The survey approach utilizes a sample

selection as a representation of the larger population. Instead of communicating with the entire population to determine the community's needs, the researcher projects those needs by surveying the representative group. Survey techniques identified by Nickens et. al. all included questionnaires and interviews. In this study, focus groups combined the group dynamics of the community forum with an oral, group survey approach of a representative sample of the larger populations.

Focus groups were the selected method of data gathering. Boone and Zenger (2001) found that focus groups of homemakers allowed for group interaction and helped to generate discussion as group members played off of one another's responses. When conducting focus groups among Iowa corn and soybean producers, Licht and Martin (2006) found that the groups were ideal for gathering information about participants' thoughts and behaviors. Because of the group interaction, the discussions generated in focus groups are socially constructed and can give insight into how decisions and opinions are developed outside of the focus group in the real world (Krueger, 1994). Focus groups can also help to reduce the researcher's influence by allowing the interaction of the group members to guide the direction of the discussion (Berg, 2001). Berg wrote that when "interactions between group members largely replaces the usual interaction between interviewer and subject, greater emphasis is given to the subjects' viewpoints" (p. 115). The ability of focus groups to reduce researcher influence and give insight into everyday-world situations makes them ideal for facilitating a needs assessment approach.

The oral, group survey technique involved asking the focus group open-ended questions, resulting in qualitative data. Lists of topics, channels, and sources were not provided to the study participants as was provided in the previous quantitative surveys addressing horse owners (Israel & Wilson, 2006; Tavernier et al., 1996) so as not to influence the data. The participants in the study therefore determined what topics were important to them and what channels and sources they use without influence from the researcher. This was necessary because the uniqueness of horse owners and enthusiasts makes it so that topics, channels, and sources generated by previous research on producers would not suffice as a list from which to question horse owners. There was a need to describe the needs of the specific audience to build a foundation of understanding, and qualitative techniques are the most effective methods for achieving description of a specific situation (Merriam, 1998).

Population

The population for this study was Texas college-age horse owners and enthusiasts. The accessible population was Texas college-age horse owners and enthusiasts residing near Texas A&M University in the Brazos Valley.

College-age horse owners and enthusiasts were chosen so that the information gathering habits of the future opinion leaders and decision makers in the Texas equine industry could be described. The phrase college-age refers to individuals between 18 and 25. This age range was determined by consulting the Texas A&M University *Enrollment Profile Fall 2007* (2007). Eighty-six percent of students attending Texas A&M University in the fall of 2007 fell within this age range. In 2003, 86% of 18- to 24-year-

olds in the U.S. attending school identified themselves as Internet users compared to 68% of 25- to 49-year-olds and 45% of 50-year-olds and older (USDC, 2004).

The USDA (2004) reported that in 2002, less than 1% of Texan principle operators with horse and pony inventory were younger than 25, 6% were 25-34, 19% were 35-44, 30% were 45-54, 25% were 55-64, and 20% were 60 or older. The AHC (2005) reported that 15% of Texas horse owners are 18-29, 36% are 30-44, 43% are 45-59, and 6% are 60 or older. However, it is likely that these numbers present an accurate representation of the number of college-age horse owners and enthusiasts, who would not be included in census data on principle operators and who might participate in horse-related activities even though they do not own horses. While college-age horse owners and enthusiasts make up a smaller percentage of current horse owners than other age groups, their decisions and opinions still affect the industry and are likely to hold even more weight in the future as the group ages. As the current group moves into positions of authority, they could change the landscape of communication preferences among horse owners, especially if changes in Internet use are considered. During personal communication, two editors of equine magazines, with 40 years combined experience, supported this assertion. The editors said that as the baby boomers “die off” marketers will have to rely on who ever comes after, so reaching college-age owners and enthusiasts and getting their loyalty when early on is a strategic move. Young people also help marketers to understand the effects of the Internet. One editor said,

“Every magazine I know is grappling with the dizzying effects of the Internet and all the technology that goes with it, and how that's impacting people's

reading and spending habits. Not to want to know how young people think--in that they're the comfortable, fluent users of the new technology--is not smart.”

Both owners and enthusiasts were included in the population to ensure that a wide representation of college-age equine industry participants existed. Not all participants in the Texas equine industry own horses. As reported by the AHC (2005), equine industry participants are owners, employees, volunteers, and family members. It was also assumed, based on the researcher's experience in the industry and the recommendations of other industry experts, that college-age horse enthusiasts are sometimes members of university sponsored, equestrian-related teams and clubs, or are employed in equine-related research, employment, training, or teaching that offers them daily interaction with horses they do not own. College-age persons are also sometimes the primary caretaker of horses that were purchased by their parents or other family members.

Sample

A purposive sample of college-age horse owners was gathered. The criteria for selecting the participants were that they were (a) college-aged and (b) either owned one or more horses or were involved in the equine industry. The sample was broken into two groups, each with a third unique criterion. Previous research by Israel and Wilson (2006) determined that Florida horse owners could be classified as “recreational or less experienced” horse owners or “horse owners on the competitive circuit” (p.65) based on their channel use. This sample of participants was divided into competitive and recreational participants to further examine the differences between the two groups.

Nineteen potential participants were identified by a professor and horse judging coach at Texas A&M University, who is also a judge for several breed organizations and a well-known and respected participant in the Texas equine industry. This expert had personal knowledge of each participant based on interaction through teaching, coaching, or other activities. Based on the expert's knowledge of the participants, nine were identified as competitive and ten as recreational.

A multiwave strategy was used to contact the participants (Dillman, 2000). The potential participants were first contacted by the industry expert by e-mail. Each participant was then sent an email by the researcher several weeks before the set focus group date, notifying them of the date and time of the focus group meeting and requesting their participation. All of the participants identified by the expert agreed to attend, and one reminder was sent several days prior to the focus group by email.

Data Collection and Analyses

The two focus groups were held in spring of 2008 at Texas A&M University. The recreational and competitive focus groups were held separately at different times on the same day. One competitive participant failed to attend the focus group, bringing the number of competitive participants from nine to eight.

The focus group questions were reviewed by a panel of experts in research techniques and an expert in the equine industry and were field tested in the fall of 2007 during six interviews with recreational and competitive horse owners who met the criteria for the study. The questions were then revised and reformatted (see Appendix A). Questions were constructed so that they would be open-ended and yield the most

information (Krueger, 1994). Participants were asked about equine-related topics that were important to them, what channels and sources they used to get equine-related information, and why they chose those channels and sources. Participants completed a questionnaire at the end of the focus group to gather demographic information (see Appendices B and C). Table 2 in Appendix D summarizes a portion of the results from those questionnaires.

During the focus group, the researcher acted as moderator. A note taker was also present and both focus groups were audio and video recorded to ensure accuracy of the data. Each focus group lasted approximately an hour and participants were offered a meal and a small gift bag containing items donated from equine breed associations and equine magazines. The note taker also made notations about important quotes and topics.

The focus groups were facilitated according to guidelines identified by Krueger (1994). The participants were given time before the session to mingle and make themselves comfortable, in an attempt to help create an open environment that would foster discussion. Each session began with a welcome, an overview of the topic, and establishment of the guidelines. Participants then introduced themselves and answered the initial question. The initial question was asked to every participant and was selected because it was easy to answer. This opened the discussion with every participant contributing something, with hopes that it would make them more comfortable with speaking in a group. The moderator maintained a neutral position in regards to the participants' statements and guided the discussion so that all participants could have an opportunity to contribute.

The data was then transcribed using Microsoft Word 2004 and analyzed using constant comparative methods (Glaser & Strauss, 1967). The constant comparative method involves constantly comparing pieces of data against other pieces of data and the data as a whole to identify relationships, correlations, similarities, and distinctions. Data that are similar are grouped together and labeled as categories. These categories are then compared to one another and back to the data as a whole. As the comparison continues, more categories are formed, and the comparison between different levels and pieces of data is constant. In this study, this method was used to draw the participants' information needs out of the raw qualitative data.

After the focus group data was transcribed, comparison of the data began. Multiple techniques were used to compare transcript segments and notes. These techniques included highlighting, note-making in the text, cutting and pasting pieces of text together to form visual groups, and the organization of text into Microsoft Excel 2004 documents. An advanced text analyzer accessible at www.UsingEnglish.com was also used. Through this online software, the text was run through a word frequency analysis that counted the number of times each word was mentioned, a hard-word analysis that counted the frequency of more complex words, and a word cloud analysis that created a visual representation of word frequency in which more frequently used words appeared larger than less frequently used words.

Each group's transcript was compared against itself, as well as against the other group's transcript, the note taker's focus group notes, and the moderator's focus group notes.

For this study to be useful and have meaning in the practice of agricultural communication, the results must be trustworthy. Like quantitative research, qualitative research must demonstrate validity and reliability. Merriam (1998) explains that “assessing the validity and reliability of a qualitative study involves examining its components and parts” (p. 199). Examination of the study often involves assessing its trustworthiness and accuracy in terms of internal validity, reliability, and external validity.

Internal validity addresses how accurately the study’s results mirror reality (Merriam, 1998). The research tries to capture and explain things as they actually are in the real world. This was important to this study, because the researcher wanted to understand how horse owners and enthusiasts get information in their everyday lives. To help enhance internal validity, several strategies outlined by Merriam were employed. Triangulation was employed by using multiple methods to confirm the findings. Written transcripts, notes from different sources (moderator and note taker), and video recordings showing the expressions and interaction of participants were used to draw conclusions. Member checks were conducted during the focus groups themselves as the moderator repeated the mentioned topics, channels, and sources and asked participants for clarification and further explanation. Participatory models of research were used during the field testing of the focus group questions as college-age horse owners and enthusiasts were involved in the creation of the study. Researcher biases were also identified at the outset of the study, including past assumptions the researcher had with communication in the equine industry that came from being a college-age horse owner

and preferences the researcher had for certain sources because of using them in the past with good results. At the time of the focus group, the researcher was also employed by a specific equine magazine acknowledged this potential bias. However, the researcher's experience in the equine industry was also an important factor in data analysis. The researcher has an "insider" perspective that enabled her to use prior experience to interpret findings and draw conclusions.

Merriam (1998) describes reliability as the "extent to which research findings can be replicated" (p. 205). Reliability of this study was ensured by establishing the background, assumptions, and theory behind the research, practicing triangulation, and leaving an audit trail (Merriam). The audit trail is the detailed description of how the study was conducted and how the results and conclusions were determined.

To help other researchers decide the external validity of this study, rich description of college-age horse owners and enthusiasts was provided. External validity refers to how applicable the study is to other situations (Merriam, 1998). By providing detailed information on this situation, others can decide how applicable it is to their own situation.

CHAPTER II

ARTICLE ONE: TOPICS

Overview

The information needs of horse owners and enthusiasts have largely been unstudied. To determine what topics are important to horse owners, two focus groups were conducted in 2008 with Texas college-age horse owners and enthusiasts. This group represents the future leaders and decision-makers of the equine industry. Participants were split into two groups, competitive and recreational, and asked what equine-related topics they consider to be important. Training was the most mentioned topic overall, and the most mentioned topic among recreational participants. Alternative medical treatments was the most mentioned topic by competitive participants. Competitive participants reported a smaller set of topics to be important, indicating that this is an specialized group with a specific set of information needs. Recreational college-age horse owners placed emphasis on topics with a broader scope, indicating their interactions with horses require less specialized information. Overall, college-aged horse owners and enthusiasts have an interest in relevant and controversial topics affecting the equine industry.

Introduction

The agricultural industry is diverse, as are its members. The breadth can be seen in the variety of Extension clients, ranging from producers to homemakers, and gardeners to horse owners, demonstrating that industry members have unique characteristics. This diversity means that members of the agricultural industry have a

wide variety of information needs that are specific to their interests. Industry members determine their information needs and decide how to get information on those topics.

Several studies have researched information preferences of agricultural industry members, namely producers, in regards to specific topics. Tucker and Napier (2002) found that when producers in three Midwestern watersheds accessed information about soil and water conservation, they used a combination of different channels and sources. Lichtenberg and Zimmerman (1999) asked Mid-Atlantic producers for their perceptions about pesticides, water quality, and related environmental effects and found that they held an average opinion, similar to that of the general public. Bruening (1991) asked producers about their sources for environmental issues and found that they preferred field demonstrations, while Kromm and White (1991) found that mass media was more effective in informing producers about water-saving practices. Reisenberg and Gor (1989) found that producers in Idaho preferred face-to-face communication when they were getting information about innovative farming practices. Wingenbach and Rutherford (2006) asked agricultural journalists about their perceptions toward and use of information sources for biotechnology issues. They found that journalists used newspapers most often, but that multiple media sources should be used to communicate biotechnology information. Boone and Zenger (2001) conducted focus groups with homemakers, a Extension client but a group that had been unstudied in recent years. The researchers asked homemakers which topics were important to them and found that family and relationship issues and consumer skills were most important.

Similar studies are absent for horse owners and enthusiasts. Israel and Wilson (2006) rated Florida horse owners on their knowledge of predetermined equine-related topics and asked them what sources and channels they used to answer horse-related questions. The researchers found that veterinarians were an important source and that magazines were the most frequently used channel. However, which topics owners and enthusiasts consider important and which horse-related questions they are seeking answers to remains unclear.

Likewise, similar studies are lacking that address the information needs of younger audiences. The AHC (2005) reported that 15% of horse owners in Texas were 18-29. While college-age horse owners and enthusiasts make up a smaller percentage of current horse owners than other age groups, they are still an important part of the industry and will likely become major players in decision-making and trendsetting in the future.

Purpose

The purpose of this study was to identify equine-related information topics that are important to Texas college-age horse owners and enthusiasts.

Methods

Because previous research has focus on the needs of producers of food and fiber, this study utilized a needs assessment approach to determine the information needs of college-age horse owners and enthusiasts in order to aide in the development of communication strategies to effectively target and service the audience (Kaufman, 1975; Nickens et al., 1980). Focus groups were the selected method of data gathering because

they can give insight into how decisions and opinions are developed outside of the focus group in the real world (Krueger, 1994), and they help to reduce the researcher's influence by allowing the interaction of the group members to guide the direction of the discussion (Berg, 2001).

Israel and Wilson (2006) determined that horse owners can be separated into competitive or recreational groups based on their channel use. To further study the difference between competitive and recreational horse owners, two focus groups were held in spring of 2008 on the Texas A&M University campus with competitive and recreational participants. The focus groups were facilitated according to guidelines identified by Krueger (1994). The focus group questions were reviewed by a panel of experts in research techniques and an expert in the equine industry and were field tested in the fall of 2007 during six interviews with competitive and recreational horse owners who met the criteria for the study.

The population for the study was Texas college-age horse owners and enthusiasts. The accessible population was college-age horse owners and enthusiasts residing near Texas A&M University in the Brazos Valley. A purposive sample of the population was selected. An expert in the equine industry who was also a professor at Texas A&M University recruited the participants based on personal knowledge of the participants. Eight participants made up the competitive group while ten made up the recreational group. The recreational and competitive focus groups were held at different times on the same day. Each focus group lasted approximately one hour.

The criteria for selecting the participants were that they were (a) college-aged and (b) owned at least one horse or were involved in the equine industry. The phrase college-age refers to individuals between the ages of 18 and 25. College-age horse owners and enthusiasts were chosen so that the information gathering habits of the future opinion leaders and decision makers in the Texas equine industry could be described. The Texas college-age owners and enthusiasts were chosen because of Texas' importance and prominence in the equine industry (AHC, 2005; Gibbs et al., 1998; USDA 2004 & 2005). Both owners and enthusiasts were included in the population to ensure that a wide representation of the college-age equine industry participants could be represented; not all participants in the Texas horse equine industry are owners (AHC, 2005).

Results

Shared Topics

Participants mentioned multiple equine-related topics that were important to them. Of the equine-related topics that were mentioned by both the competitive and recreational groups, training and health/medicine were the most discussed. Also mentioned in both groups were breeds, disciplines, horse sales, entertainment, showing, nutrition/feeding, and shoeing.

Training was the most mentioned topic. Training was more popular among participants in the recreational group. In some instances, references to training very general: "I think that *Performance Horse* has really good training stuff." In other instances, they were very specific: "One thing, I've been talking about a friend with

horse-related stuff, and personally with my horse, is lateral exercises for just getting them back in shape.” Training was defined by participant discussion as teaching a horse how to do new things or practicing and improving the horse’s performance in a given task. The participants were interested in learning new methods of teaching horses and emphasis was often placed on the importance of gathering and comparing different methods. One participant said, “With friends, we talk about different ways to do things on horses, getting different peoples’ opinions on how to teach your horse how to do one thing or another.”

Health/medicine was the second most popular shared topic. The topic was more popular among competitive participants. References to health and medicine were at times very general: “sports medicine.” Other references were very specific: “Some vets want to use more steroid type based injections, and other vets want to use non-steroids.” Lameness was the most mentioned specific health issue. Participants said things like, “If I have a lameness question I’m going to go to my lameness vet.”

Competitive Topics

The topics mentioned by the competitive group were alternative medical treatments, breeds, entertainment, disciplines, health/medicine, horse sales, nutrition/feeding, shoeing, showing, tack, training, upcoming events, and “who’s who.”

Alternative medical treatments were the most mentioned equine-related topic by the participants in the competitive focus group. Specific treatments cited included swimming horses, massage therapy, chiropractic, acupuncture, and herbal supplements. While alternative medical treatments were considered an important topic, participants

also expressed concern about whether the treatments were safe and effective, and some of their interest in the topic was determining how legitimate the treatments are. For example, one participant said,

My horse injured his back in a trailer accident, and I've been told to take him to a chiropractor (to) get his neck worked on. I had a friend whose horse messed up (its) neck, and she took (it) to the veterinarian, and they worked on its neck, and they ended up making it way worse. Now her horse is completely lame. So, that scares me, knowing what to do and what not to do.

Health/medicine was the second most mentioned topic. The participants were interested in general veterinarian medicine, sports medicine, and in new medical and surgical technologies. One participant said, "Wanting to go into veterinary medicine, all the new technologies that they advertise and come out with, that's always interesting to me – to see what they're going to do in the future."

The competitive participants expressed interest in knowing "who's who" in the equine industry. They said it was important to keep track of their competitors and to know which trainers and professionals are excelling. One response was, "As a competitor...I always seem to be trying to hear who's in the top, who got a nice horse, who's going to the Olympics. At least in the jumping world, that's pretty important – the names." Another participant said it was important to "see what professionals (and) what ranches (are) staying on top of the game, staying with the trends, and keeping up." The participants also referred to this topic as the "gossip" or "the soap opera," indicating that an element of the sensational can exist. One participant said, "So, just I guess, keeping

up on the gossip I guess you want to call it.” Another participant responded, “Yeah, the soap opera. ‘As the spur turns.’ That kind of fun stuff.”

The competitive participants mentioned training as an important topic. The participants referenced working directly with a trainer and training within their respective disciplines to fine-tune and improve. For example, one participant said, “I like to go and figure out the trainers that are in the same event that I’m doing and get advice from them on what I should be looking for and what I need to be working on.”

Recreational Topics

The equine-related topics mentioned by the recreational group were breeding/foaling, breeds, conditioning, current events, disciplines, entertainment, genetics, health/medicine, history, judging, horse sales, networking/careers, nutrition/feeding, shoeing, training, trends, and upcoming events. The most mentioned topic was training. Following closely was current events.

Participants spoke most often about training, indicating that they were interested in teaching their horses new things, learning new methods, and comparing different ways of training. One participant said, “It’s fun to go out and ride and actually try to get your horse to do something that he’s not doing now... to exercise your horse and yourself, and to learn new things.”

The participants were interested in a wide variety of current events in the equine industry. One participant mentioned horse slaughter, saying “I like to keep up with what’s going on in the horse slaughter, like when they closed those (plants) down and politically what’s going on with the horse industry and how it’s changing.” Another

participant spoke about the wild horse program: “One thing I try to keep up with is the government and the wild horse program. Having participated in stuff related to that and having owned a wild horse and training them, I try to keep up with that sort of thing. It's interesting.” Cloning was also mentioned by the participants. One statement was, “Cloning is also a hot topic in the industry right now. They're lots of articles out on that. That's kind of an interesting subject.” Another participant mentioned that the national animal ID program was an essential topic: “You have to kind of keep up with how things are going with the national animal ID stuff, whether it stays voluntary or becomes mandatory.” The 2008 Olympics equestrian competitions were also of interest. One participant said, “I know there's a lot of question about who's taking their equestrian teams over to China and health hazards and what they're doing over there as far as containing flu outbreaks and that kind of thing.” Participants said that they monitor equine-related “daily news stories” and “headlines,” and “what's big today” in the equine industry. The phrase “keep up with” was used often, suggesting that this is a topic the participants actively seek information about on an ongoing, consistent basis. This topic elicited the most excitement among the participants and sparked the most interaction between them, indicating that this is a topic they feel passionate about.

The recreational participants said that specific horse breeds and the unique issues that relate to them was an important and interesting topic. The specific breeds mentioned were wild horses, Quarter Horses, Appaloosas, and Standardbreds. One participant said, “The Standardbreds that I worked with this summer, I like to see how some of them have done that I've become familiar with or got to work with.”

Comparing Competitive and Recreational Participants

The recreational participants covered a wider variety of issues, mentioning more topics than the competitive participants. The recreational group also had more consensus that a given topic was important.

Each group had topics that were important to them but not to the other group. The most-mentioned topic in the competitive group, alternative medical treatments, was not mentioned once in the recreational group discussion. “Who’s who” and tack were also topics mentioned only in the competitive group. While mentioned in both groups at least once, health/medicine, entertainment, and disciplines were more important to the competitive group.

The second most important topic to recreational participants, current events, was not mentioned by the competitive groups. Conditioning, genetics, history, judging, networking/careers, and trends were also omitted by the competitive group. Breeds, horse sales, and training were mentioned by both groups, but were considered more important by the recreational group.

Training, a topic considered important by both groups, was approached differently by each set of participants. The competitive participants focused more on training “tips” and “techniques” from professionals in their respective disciplines, while the recreational participants were interested in “how to teach your horse,” “how to do things,” and “learning new things.”

Conclusions and Discussion

The results agree with previous research (Israel & Wilson, 2006) that horse owners and enthusiasts can be broken into two groups, competitive and recreational, that have unique interests and information needs. In many cases, the competitive and recreational participants found different topics to be important and interesting. In situations where both groups were interested in a topic, each group placed a unique and slightly different emphasis on the topic.

The results seem to indicate that competitive college-age horse owners and enthusiasts are a specialized group who consider a limited scope of topics to be important. Alternative medical treatments and advanced medicine are important to a group who are pushing their animals to meet the high standards of physical fitness needed to compete at higher levels. These horse owners and enthusiasts put a heightened importance on their microcosms. While they are likely aware that topics such as horse slaughter and cloning will have a significant impact on the industry in which they operate, “who’s who,” tips for fine-tuning in their respective sports, and other specialized information receives their immediate attention more than topics that apply to a broad scope of horse owners.

Recreational college-age horse owners place more emphasis on topics with a broader scope, most likely because their interactions with horses requires less specialized information. They see opportunities to learn new things and teach their horses new things, because they do not consider themselves specialists. They identify with a larger community and relate to a greater number of people, which leads to a more

diverse array of topics to catch their interest. Their interests can be spread across multiple topics, as they do not have to specialize in one. The subjects they consider important have more of an “every-day” or “real world” relevance.

Despite being younger than the average horse owner, college-aged horse owners and enthusiasts have an interest in relevant and often controversial topics affecting the equine industry, including emerging medical technologies and political issues such as slaughter, cloning, and national animal identification. These young horse owners and enthusiasts will soon be at the forefront of decision making on these topics as they mature and gain more decision-making power and influence. Encouraging their further interest, exploring their current opinions, and involving them in industry-wide discussions about these topics will be valuable to bridging the gap between generations of horse people and predicting the future climate of the industry.

Groups, such as Extension, interested in communicating and building relationships with college-age horse owners should be certain that they are addressing the topics that are important and relevant to the audience. Different topics should be emphasized if the communicator has a knowledge of which group their audience more closely identifies with – competitive or recreational.

This research serves as a starting point for future quantitative studies, giving researchers a bank of relevant topics from which to build survey instruments. The results provide a description of this unique group of horse owners and enthusiasts. Other groups of college-age horse owners in different geographies, affected by different conditions would likely have some unique topics of interest. This group of participants was likely

extremely affected by the presence of Texas A&M University, where most of the participants were enrolled. The group was fairly homogeneous: many participants were members of the same clubs, classes, university majors, activities, etc. Future studies would benefit from including a more diverse group of horse owners and enthusiasts. Future studies should also investigate the correlation between specific topics of interest and which sources and channels are used to get information on those topics.

CHAPTER III

ARTICLE TWO: CHANNELS AND SOURCES

Overview

This study describes the channels and sources used by Texas college-age horse owners and enthusiasts to get equine-related information. The channel/source use of this group has largely been unstudied. The role of the Internet in communication has also changed in recent years among younger audiences. Data was collected through focus groups conducted in 2008. Participants were divided into two groups based on their participation in the industry, competitive and recreational, and asked what channels/sources they use to gather equine-related information. Results showed that participants use a combination of channels/sources and that competitive and recreational participants often place importance on different channels/sources. Face-to-face communication was important to both groups. Magazines were important for competitive participants, while the Internet was important to recreational participants. The results suggest that communicators need to make themselves recognizable in the equine industry. Participants prefer to get information from industry specialist sources, such as trainers, veterinarians, other owners and enthusiasts, breed associations, and equine magazines. Participants' perceptions of trustworthiness are affected by the source's ability to demonstrate equine-specific knowledge and the source's reputation and success among equine-industry members.

Introduction

The agricultural industry is diverse, as are its members. Looking at the variety of Extension clients, which ranges from producers, to homemakers, to gardeners, and horse owners, it is evident that industry members have unique characteristics. This diversity means that members of the agricultural industry have a wide variety of information needs that are specific to their interests.

Industry members determine their information needs and decide how to get information. When industry members access agricultural information, they make choices about the methods they use and whom they want to get information from. When operators make these choices, they select channels and sources.

Groups desiring to communicate with industry members have a vested interest in knowing the channels and sources industry members use and why they use them. The foremost of these groups has been Extension. Just as agricultural industry members have a choice in how they access information, groups like Extension have a choice in how they disseminate information. Knowing the channels and sources their clients use allows communicators to have a better understanding of how to communicate with their clients.

While there is a substantial body of research on the use of and preference for channels and sources by agricultural industry members, much of the literature fails to distinguish between channels and sources. Practically speaking, sources are the organizations and individuals who provide information, and channels are the mediums through which information is communicated. Tucker and Napier (2002) stated that “sources provide the content or expertise of interest to the information seeker, while

channels refer to methods or vehicles by which information is transferred or received” (p. 299). This study investigated both the channel and source use of Texas college-age horse owners, treating each as distinct parts of the communication process that function dynamically.

Studies have shown that agricultural audiences often use more than one channel or source to get information. Israel (1991) and Lasley et al. (2001) found that producers wanted Extension information to be available through a wide variety of channels. Patrick and Ullerich (1996) found that agricultural bankers, farm managers, and large-scale producers used multiple sources depending on the type of decision they are making. Licht and Martin (2006) found that the best way to communicate with Iowa corn and soybean producers was through multiple communication channels.

Research has also shown that producers often prefer face-to-face communication. Rollins et al. (1991) found that activities such as on-farm consultations, demonstrations, and tours were Pennsylvania producers’ most preferred channels when receiving environmental information. Bruening (1991), Carter and Batte (1994), Ford and Babb (1989), Gamon et al. (1992), Lanzeby (2005), Lasley et al. (2001), Obahayujie and Hillison (1988), Reisenberg (1989), Richardson and Mustian (1994), Trede and Whitaker (1998), and Tavernier et al. (1996) also found that producers prefer interactive, face-to-face communication.

Although face-to-face communication has remained a consistently used method for agricultural audiences, the literature has also shown that different groups use and prefer different channels and sources, and they desire channels and sources that are

specifically tailored to meet their needs. When North Carolina Extension agents interviewed producers about their preferred delivery methods for Extension information (Richardson & Mustian, 1994), the producers expressed that they desired methods that provided “subject and audience specificity” (p. 26). Richardson and Mustian concluded that a delivery method’s “relevancy and specificity” (p. 26) to meeting clientele needs was the greatest factor affecting client preference. In their study on the preferred channels of homemakers, Boone and Zenger (2001) concluded that it was important to “target information to specific groups using a variety of channels” (p. 25). Israel (1991) also found that it was important to match information channels to the preferences of the audience. Tucker and Napier (2002) emphasized that communicators should not use blanketing approaches when trying to reach producers, but should target specific messages to specific audiences.

The literature has also show that perceived trustworthiness affects how agricultural audiences view and select sources. Hunt and Frewer (2001) found that the source’s vested interest in the message and degree of knowledge were important trust determinants for consumers of information about genetically modified foods. Coulson (2002) found that adolescents were able to differentiate between different sources of information on food safety based on trustworthiness. Wingenbach and Rutherford (2005) asked Texas journalists about the trustworthiness of information sources about agricultural biotechnology information and found that university scientists and researchers and newspapers were considered more trustworthy than other sources.

Research has shown that producers traditionally do not use or prefer technologically advanced information channels (Amponsah, 1995; Batte et al., 1990; Carter & Batter, 1994; Obahayujie & Hillison, 1988; and Riesenbergs & Gor, 1989). Even recent research has shown that many producers do not use the Internet. Brashear et al. (2000) found that Internet and e-mail were among the least used communication channels for swine producers getting information about new technologies. In a 2002 study, Rexroad found that 30% of master gardeners surveyed in West Virginia have no access to Internet or e-mail. Tucker and Napier (2002) reported that producers in Midwestern watersheds did not prefer electronic or computer sources when getting information about soil and water conservation. Horse owners surveyed by Israel and Wilson (2006) infrequently used university Web sites and county Extension Web sites when getting horse information. Suvedi et al. (1999) reported that Michigan producers do not use Web-based information.

Even though producers have traditionally been hesitant to embrace innovative communication methods, some studies have shown that producers are beginning to embrace new technologies. Groups like Extension have recognized the potential of Internet-based channels and have begun to explore their benefits for communicating with clients. As early as 1994, Richardson and Mustian reported that North Carolina producers had an interest in computerized methods of information delivery and wanted to stay in touch with new technologies. Lasley et al. (2001) found that producers wanted computer-assisted technologies to complement more traditional Extension communication methods. Denniston and Callahan (2005) investigated the effectiveness

of a Web site for delivering 4-H horse project information to youth, parents, leaders, and Extension staff and found that “most users felt they were more in touch with the State Extension Office because of the website” (p. 33). Cavinder et al. (in press) found that an on-line horse conformation evaluation page had a “positive effect in educating coaches in improving their overall knowledge of halter judging” (p. 8). Lazenby (2005) found that the Internet is a “highly influential source” (p. 215) for livestock producers in the adoption of ranching practices. National agricultural journalists investigating agricultural biotechnology issues were reported by Wingenbach and Rutherford (2006) to often use the Internet.

This body of research on agricultural channel and source use has overwhelmingly focused on the channels and/or sources used and preferred by food and fiber producers when accessing a variety of agricultural information (Batte et al., 1990; Bruening, 1991; Carter & Batte, 1994; Ford & Babb, 1989; Gamon, et al., 1992; Lichtenberg & Zimmerman, 1999; Reisenberg & Gor, 1989; Richardson, 1989; Richardson & Mustian, 1994; Schnitkey et al., 1992; Trede & Whitaker, 1998). Fewer studies were found that describe the information gathering habits and preferences of livestock producers than crop producers. Amponsah (1995); Jones et al. (1989); Suvedi et al. (1999); Tavernier et al. (1996); and Tucker and Napier (2002) surveyed a combination of crop and livestock producers. Obahayujie and Hillison (1988) surveyed beef producers’ assessments of different channels used by Extension agents to disseminate information. Lazenby (2005) investigated the used and preferred channels of livestock producers in Mexico for getting information about ranching practices. Alfaro (2004) described the information sources

used and education delivery methods preferred by Honduras dairy producers. Brashear et al. (2000) surveyed swine producers to determine how they were informed about new technologies.

Groups who are not producers of food and fiber, but are often Extension clients or involved somehow in the agricultural industry, have also been included in the literature on source and channel use and preference. These groups have included homemakers (Boone & Zenger, 2001), Extension Master Gardeners (Rexroad, 2002), farm managers and agricultural bankers (Patrick & Ullerich, 1996), and journalists (Wingenbach & Rutherford, 2005, 2006).

Similar studies are lacking for persons involved with horses. Horse owners are different from the producers that have been the primary focus of channel and source research. While crop and livestock producers produce their commodities for consumption as food or for use as fiber or fuel, horse owners do not produce or maintain their livestock for these purposes. Horse owners instead maintain horses for sport, recreation, competition, work, and other activities (AHC, 2005; Gibbs et al., 1998). Tavernier et al. (1996) included horse farm enterprises in their survey on New Jersey producers' preferred methods of getting farm-related information. However, only 4% of their sample was livestock producers whose commodity was horses. Eighty-nine percent of those horse producers preferred to receive Extension information through "direct communications with specialists/agricultural agents, farm supply and equipment vendors, and representatives from lending institutions," 11% preferred "print media such as farm newspapers, trade journals, [and] agricultural newsletters," and none preferred

“equipment and machines, which include facsimile machines, computers, modems, VCRs, [and] telephones” or “broadcast media which include radio, commercial and cable television” (pp. 76-77). Israel and Wilson (2006) surveyed Florida horse owners to determine the sources and channels they use to get information about horses. The researchers found that horse owners frequently used veterinarian, farriers, other horse owners, and trainers as information sources, and that they seldom used Extension agents, private consultants, or relatives. The channels horse owners used most frequently were equine magazines. Less frequently used channels were newspapers, Web sites, and field days. Israel and Wilson also determined that Florida horse owners could be grouped as “recreational or less experienced” horse owners or “horse owners on the competitive circuit” (p. 65) based on their use of information channels. These studies used quantitative methods to survey a group about which little was known. Israel and Wilson found that the channel option “other” received a wide variety of write-in answers. A need exists to examine horse owners and enthusiasts to describe their information needs and preferences before accurate survey instruments can be developed. Boone and Zenger (2001) found that focus groups were effective for describing the information needs of another unique and largely unstudied group, homemakers.

This study looked at Texas college-aged horse owners and enthusiasts. Texas has consistently been a leader in the United States equine industry. In a 1998 study, Gibbs et al. reported that Texas led the nation in the number of registered American Quarter Horses, American Paint Horses, Appaloosa Horses, and American Miniature Horses and was second in the nation in the number of registered Arabian Horses and Thoroughbred

breeding stallions. A 2005 USDA review of changes in the equine industry between 1998 and 2005 reported that in 2002, Texas was the state with the most horses and ponies and the most farms with horses and ponies in the United States. A 2006 USDA Texas agricultural overview rated Texas as second in the U.S. in the sales of horses, ponies, mules, burros, and donkeys.

While college-age horse owners and enthusiasts make up a smaller percentage of current horse owners compared to other age groups (AHC, 2005), their decisions and opinions still affect the industry and are likely to hold even more weight in the future as the group ages. As the current group moves a position of more authority as they increase in age, they could change the landscape of communication preferences among horse owners, especially if changes in Internet use are considered.

Research has shown that age is one of the factors that can affect a producer's use of and preference for innovative communication technologies, such as the Internet, and that age and preference for high-tech information channels are often negatively related (Amponsah, 1995; Lazenby, 2005; Riesenbergs & Gor, 1989; Suvedi et al., 1999). In 2003, 86% of 18- to 24-year-olds in the United States in school identified themselves as Internet users compared to 68% of 25- to 49-year-olds and 45% of 50-year-olds and older (USDC, 2004). However, in the previous research regarding information channel and source use, the mean age of the producers studied was 50 or older (Amponsah, 1995; Carter & Batte, 1994; Gamon et al., 1992; Israel, 1991; Licht & Martin, 2006; Rollins et al., 1991) or the majority of producers studied were 50 or older (Riesenbergs & Gor, 1989; Suvedi et al., 1999). Research has failed to keep up with the changes in

communication technology use by young people in agriculture, which is why this study included college-age horse owners and enthusiasts.

Purpose

The purpose of this research was to describe the equine-related information gathering habits of Texas college-age horse owners and enthusiasts. The objectives for this study included:

1. Describe the information channels used by Texas college-age horse owners and enthusiasts to get equine-related information.
2. Describe the information sources used by Texas college-age horse owners and enthusiasts.

Methods

Because previous research has focus on the needs of producers of food and fiber, this study utilized a needs assessment approach to determine the information needs of college-age horse owners and enthusiasts in order to aide in the development of communication strategies to effectively target and service the audience (Kaufman, 1975; Nickes et al., 1980). Focus groups were the selected method of data gathering because they can give insight into how decisions and opinions are developed outside of the focus group in the real world (Krueger, 1994), and they help to reduce the researcher's influence by allowing the interaction of the group members to guide the direction of the discussion (Berg, 2001).

Two focus groups were held in spring of 2008 on the Texas A&M University campus with competitive and recreational horse owners to further examine the

differences between the two groups that were established in previous research (Israel & Wilson, 2006). The groups were conducted according to guidelines identified by Krueger (1994). The focus group questions were reviewed by a panel of experts in research techniques and an expert in the equine industry and were field tested in the fall of 2007 during six interviews with recreational and competitive horse owners who met the criteria for the study.

An expert in the equine industry who was also a professor at Texas A&M University recruited the focus group members based on personal knowledge of the participants. Eight participants comprised the competitive group, while ten made up the recreational group. The recreational and competitive focus groups were held at different times on the same day. Each focus group lasted approximately one hour.

The criteria for selecting the participants were that they were (a) college-aged and (b) owned at least one horse or were involved in the equine industry. The phrase college-age refers to individuals between the ages of 18 and 25. College-age horse owners and enthusiasts were chosen so that the information gathering habits of the future opinion leaders and decision makers in the Texas equine industry could be described and the changes in communication technology embrace could be considered. Texas was selected because of its importance and prominence in the equine industry. Both owners and enthusiasts were included in the purposive sample to ensure that a wide representation of the college-age equine industry participants were represented; not all participants in the equine industry in Texas are horse owners (AHC, 2005).

Results

Shared Channels

College-age horse owners and enthusiasts use multiple channels to access equine-related information. The channels mentioned in both groups were face-to-face communication, magazines, the Internet, and events. Face-to-face communication, the Internet, and magazines were the most popular shared channels, however the Internet was disproportionately more popular with recreational participants. Use of face-to-face communication and magazines was more evenly distributed between the groups.

Competitive Channels

The most mentioned channel among competitive participants was face-to-face communication. The use of this channel was primarily casual in nature and did not involve the formal consultations described in previous research (Israel and Wilson, 2006). Participants mostly reported speaking with a contact they already knew and were familiar with. One participant said, “If there’s any questions, I’m going to go physically to a person.”

Magazines were the second most discussed channel among the competitive group. The participants mentioned specific magazines by name. For example, one participant said, “The *America's Horse* how they have the quotes section in the back, I read that every single time I get the *America's Horse*.” Participants also spoke about magazines in general: “I think one things that I get out of reading the magazines, we were talking about building our general knowledge base especially with medicine stuff and training stuff, I feel that they may, are kind of thought provoking.” All of the

magazines mentioned were equine magazines. Participants used magazines in different ways. Some used them to look for specific information while others browsed with no predetermined information need in mind. Some reported that they did not prefer using magazines as a channel for accessing specific information, however, they would use them for browsing. One participant commented, “If I have a specific question or something that I’m specifically looking for, I’ll probably go seek somebody out instead of going through all my magazines trying to find the one thing that I’m looking for. The magazines are more, one, for entertainment, but two, for just expanding your knowledge-base.”

While some participants said that they use the Internet as a channel, more specifically addressed how the Internet was not a preferred channel. One participant said when referring to the group of competitive participants, “You don’t really use the Internet.”

Recreational Channels

The Internet was mentioned most often among recreational participants. Participants talked about the Internet in general terms such as “Internet,” “online,” and “Web sites.” For example, one participant said, “If I hear about something through someone or through a magazine that’s interesting to me though I tend to like go online and try to look up more information about it that way.” Recreational participants also mentioned specific search engines, Web sites, and social networking sites.

Face-to-face communication was the second most mentioned channel. Like the competitive participants, recreational participants described this channel use as informal:

they were speaking with familiar contacts in informal settings. Participants said things such as, “My trainer back home, she’s one person I know if I need to ask any type question, nutrition or training or farrier related questions or lameness, anything, I know I can talk to her and she’ll be a person I want to get an answer from.”

Magazines, books, TV, and events were mentioned less frequently. Participants spoke generally about magazines, referring often to “articles.” They also mentioned several specific publications. One participant mentioned that they did not like magazines: “I don’t want to pay for the journals. I don’t know, \$60 a year for two years, I would just rather not pay it. You might see on a cover they might have one article you really want, but you don’t want to pay four dollars for the magazine. So, I won’t pick it up.”

Some participants mentioned using books, but also said that they were sometimes dissatisfied with books: “I know a lot of the books, it’s kind of frustrating because they’re so old. They’re so out of date.” Both of the references to TV were about a specific station, Rural Farm Development Television (RFDTV): “Sometimes those shows on RFD-TV are kind of fun to watch.” Events mentioned as information channels were horse shows, fairs, expos, clinics, and seminars hosted by university clubs.

Factors Affecting Channel Selection

The factors affecting channel selection for each group were markedly different. The two groups only shared two factors, convenience and learning preference. However, of the two factors, each was considered significantly more important by one of the groups.

The most important factor affecting channel selection for competitive participants was access to trustworthy sources. Participants indicated that they were more likely to use a channel that would give them access to sources they considered reliable, and less likely to use a channel that required filtering or testing of the information. This factor has a significant impact on the way participants viewed the Internet. One participant said, “You have to really filter the Internet,” and another said, “Be willing to take everything with a grain of salt. There is so much out there that is bogus.”

Competitive participants also preferred channels that provided diverse information options. One participant praised the Internet because with it, “you have so much at your hands.” Another participant said he preferred magazines to face-to-face communication because he can “in a hour, read an article by...a whole plethora of people.” For some, face-to-face communication offered more options, because they could manipulate the situation by asking multiple people multiple questions, instead of relying on what was provided to them in a magazine.

The competitive participants’ learning preference also factored into their channel selection. Participants talked about being visual learners and needing to see information to be able to process it. However, this meant different things to different participants. Two competitive participants who both considered themselves visual learners disagreed on whether magazines or face-to-face communication was a better channel. One preferred seeing pictures in magazines, while the other preferred having someone demonstrate a concept to them in person. Learning preference was also important to one

of the recreational participants who said, “If there are pictures to help me understand the concept, then I’m going to look at that.”

One competitive participant mentioned that convenience was an important factor in determining which channel to use, whereas with the recreational participants, convenience was the most mentioned factor. Recreational participants wanted channels that were quick and easy to access and use. They said things such as, “the quickest way to get information is online — so that’s what’s easiest for me,” and “having (journals) mailed directly to you is sometimes easier than going to the library or having to go online.” Participants also described face-to-face communication as convenient. If a participant was on a horse, or in an activity with a horse, they were more likely to talk to someone physically nearby because that was “easiest.”

Entertainment was also important to recreational participants when selecting channels. One participant said that entertainment was “one of the biggest reasons” for selecting a channel. That participant said, “If I’m going to do it on my own, it’s going to be something fun. If it’s boring, I’m not going to.” Participants considered both TV and magazines entertaining.

Price was also a factor for one recreational participant. For that participant, the cost of magazines and DVDs prevented them from accessing information through those channels.

Shared Sources

Participants reported using a wide variety of sources for equine-related information. Some sources were mentioned specifically by name, such as *The American Quarter Horse Journal*, while others were mentioned less specifically, such as veterinarians. Table 1 includes all the sources that competitive and recreational participants reported using.

Trainers, other owners and enthusiasts, and professors were the most mentioned sources when results from the two groups were combined. However, each group had a different set of top sources.

Competitive Sources

The competitive participants most relied on information from trainers, other owners and enthusiasts, and veterinarians. Trainers were the most mentioned source, and the competitive participants mostly reported using trainers that they were familiar with through a working relationship. The participants said things such as, “I may just go seek out my personal trainer” and “you go to your trainer.” This source was a familiar and accessible one that participants felt comfortable with.

Table 1. *Sources Reported by Number of Participants*

Source	Competitive		Recreational		Total
	Source	Frequency	Source	Frequency	
Trainers		6		4	10
Other Owners and Enthusiasts		5		3	8
Professors		3		4	7
Specific Web sites		1		5	6
agdirect.com			X		
aqha.com	X				
dreamhorse.com			X		
equine.com			X		
Facebook			X		
horsedirect.com	X				
horsetopia.com			X		
Google			X		
YouTube			X		
MySpace			X		
Industry Professionals		3		1	4
Specific Equine Magazines		3		1	4
America's Horse	X				
The American Quarter Horse Journal	X		X		
The Chronicle of the Horse	X				
EQUUS	X				
Horse&Rider	X				
Horse Illustrated	X				
Midwest Horse Digest	X				
NRHA Reiner	X				
Performance Horse	X				
Practical Horseman	X				
Family Members		2		2	4
Breed Associations				4	4
American Quarter Horse Association			X		
Appaloosa Horse Club			X		
U.S. Trotting Association			X		
Veterinarians		4			4
Ranch Owners				3	3
Libraries		2			2
Judges		2			2
RFDTV				2	2
Interest Groups				2	2
American Horse Council			X		
Equine Working Species Group			X		
Co-Workers				1	1

Competitive participants reported using other horse owners and enthusiasts to get equine-related information. These other owners and enthusiasts were also competitive or had some kind of experience with the topic that the participant was interested in. One participant said, “I go through friends that I’m hauling with, or the person who had the horse before me.” Another reported, “If I know somebody that’s dealt with the same thing, I’ll go to them.”

Veterinarians were the third most popular source used by the competitive participants. Like with trainers, participants reported using their “personal” veterinarians. For example, when asked how they get information, one participant said, “I’d have to say my vet back home.”

Recreational Sources

Specific Web sites, breed associations, professors, and trainers were the sources mentioned most often by the recreational participants.

Specific Web sites were the most mentioned information source. Web sites reported included a breed association site, sites dedicated to the selling and purchasing of horses and horse-related products and services, social networking sites, a search engine, and a video-sharing site.

Breed associations, professors, and trainers were all mentioned at least once by four participants. One participant said, “I get most of my information from the breed associations,” while other participants mentioned specific associations: The Appaloosa Horse Club, the American Quarter Horse Association, and the U.S. Trotting Association.

Professors the participants had taken classes from or worked with in a one-on-one setting were also an important source. Several participants mentioned specific professors, and others said things like, “professors are a big resource” and “the equine office is always open and all the professors are more than willing to take time out of their day to answer whatever (question) you might have about the horse industry.”

Like the competitive participants, the recreational participants mostly mentioned trainers that they already had an established personal relationship with. Participants referred to sources such as “my trainer” and “a trainer friend back home.” However, one participant reported using trainers who she did not have personal relationships with. This participant paid to attend clinics hosted by different trainers.

Factors Affecting Source Selection

The participants primarily based their source selection on perceived source trustworthiness. While trust was important to both competitive and recreational participants, they sometimes used different criteria to determine trustworthiness.

The amount of topic-specific knowledge was an important trust determinant for both groups. Whether they were accessing information from a friend, veterinarian, or any other source, the participants emphasized the importance of the source being knowledgeable in a certain field or topic. One competitive participant said, “If you go to someone, usually you go to them because they are pretty current and knowledgeable in their field.” A recreational participant similarly said she would go to friends who “know what they’re talking about.”

How recognized a source was by other owners and enthusiasts and equine industry members also affected both groups' perception of source trustworthiness. Both groups mentioned the phrase "word of mouth," and reported that this was an important standard in the equine industry. Competitive participants were more likely to trust a source if people they knew had referred it. Recreational participants likened this factor to "popularity," saying that the more trustworthy sources gain a "following."

Both groups also viewed the successfulness of the sources as an indicator of trustworthiness. Participants indicated that successfulness was measured by accomplishments. Participants said trustworthy sources have "won things" or "done something really good in the industry."

Trustworthiness determinants unique to the competitive group were how up-to-date and "in touch" a source was with current industry topics, what kind of principles and values the source held, whether the participant had experienced consistently good results based on the source's information, the participant's assessment of the source's talent level, how many industry "connections" the source had, and whether or not the source was honest.

Factors used to evaluate source trustworthiness that were unique to the recreational group were how accurate and "research-based" the source's information was, the source's use of industry language and jargon, and how willing the source was to invest in time spent with the participant.

Desired Sources and Channels

Participants in both groups reported gaps in the availability of preferred channels and sources. Competitive participants said that they wished there were more trustworthy sources available on the Internet. Participants mentioned existing, non-equine-related, Internet accessible sources, such as CNN.com and WebMD.com, and said that they wished there were equivalents in the equine industry.

One recreational participant also cited CNN, mentioning that a similar, but equine-related Web site would be convenient because it could aggregate horse information from multiple sources into one place. This participant said, “It would be really cool if there were a CNN type deal for horses where it was daily updates as opposed to waiting until next month’s (journal) edition comes out, or if you don’t want to go searching all over the Internet for different articles.”

Recreational participants also wished more options were available for equine-related videos. Participants said that DVDs were too expensive, and that they wish more videos were available for download on the Internet or to be rented.

Conclusions and Discussion

Texas college-age horse owners and enthusiasts use multiple channels and sources to access equine-related information. Some channels and sources were important to both competitive and recreational participants, while others were more important to one group. This supports previous research (Israel & Wilson, 2006) reporting that competitive and recreational horse owners use different channels.

These results agreed with previous literature stating that face-to-face communication was an important channel for agricultural industry members. Face-to-face communication was important to both competitive and recreational participants. Magazines were important for competitive participants, while the Internet was important for recreational participants. Competitive participants selected channels that connected them with trustworthy sources. Being involved in high-level competition demands that the competitive participants have accurate and trustworthy information. They need channels that give them access to many different options, so they can compare and select the information that is most reliable and best suited to their respective sports and disciplines. Recreational participants were more interested in convenient and entertaining channels. Because they were not seeking specialized, competition-related information, they were less likely to go out of their way to get information through an inconvenient channel. They want practical information that is accessible in practical and convenient ways. There was also more flexibility with how recreational participants accessed information. They were interested in channels that were new and innovative. They also used channels that provided entertainment along with information. Communicators wanting to reach college-age horse owners should know if they are dealing with a mixed group or a group that is primarily competitive or recreational so that they can target their information through the appropriate channels. In all circumstances, because participants mentioned multiple channels as important, communicators should broadcast their message across multiple channels.

While previous research has found that agricultural audiences are hesitant to use new communication technologies (Amponsah, 1995; Batte et al., 1990; Brashear et al., 2000; Carter & Batte, 1994; Obahayujie & Hillison, 1988; Rexroad, 2002; Suvedi et al., 1999; Tavernier et al., 1996; Trede & Whitaker, 1998; Tucker and Napier, 2002; and Israel & Wilson, 2006), the results of this study show that the Internet was already an important source for college-aged horse owners and enthusiasts, and it will likely only increase in importance. Communicators need to use the Internet as a channel now, especially if they desire to reach college-aged recreational horse owners and enthusiasts. While competitive participants reported that they were unlikely to use the Internet because they were worried about the trustworthiness of sources available through it, they also expressed desire for more trustworthy sources to be made available through the Internet in the future. If these participants could be convinced of the trustworthiness of a source, it is possible that they would be more willing to use the Internet to access information from that source. Considering the results of this study and national surveys on Internet use (USDC, 2004), further research might show that college-aged persons in other sectors of the agricultural industry also consider the Internet to be an important tool.

The participants' discussion of Internet use suggests that in some instances Internet has influenced the traditional communication models. In all of the traditional models, communication begins with the source and moves through the channels. The models are source drive: source-message-channel-receiver (Berlo, 1960). However, for the participants, the communication process via the Internet was sometimes channel

driven. In some instances, the communication process began with the channel, the Internet. The Internet was used to get messages (information). For example, the participants used search engines to search for information on a specific topic. The channel then provided sources to pick and choose from. In instances like these, the emphasis is less on source selection and more on channel selection. From the receivers point of view, the process be interpreted as channel-message-source. The Internet also allows receivers to take a more active role in the communication process. They are no longer restricted by a limited selection of sources and messages. They can compare and select sources and information all in the convenience of their own home, or any place they have access to the Internet.

The results indicate that channel and source selection are related. Competitive participants most preferred face-to-face communication, while the participants' personal trainers and veterinarians and fellow competitive owners and enthusiasts were their most preferred sources. It is possible that the participants choose face-to-face communication because it is the best way to get information from these personal sources.

Trustworthiness was important not only when competitive participants were selecting sources, but also when determining which channels to use; they preferred channels that linked them with trustworthy sources. Face-to-face communication offers the participant the opportunity to create a firsthand evaluation of the trustworthiness of the source, which is more difficult to do with channels such as the Internet. However, it is unclear from this study whether participants choose channels that link them with specific sources, or use specific sources because they are the ones most readily available through

the participants' preferred channels. To solve this dilemma, further research on the relationship between sources and channels for this audience is needed.

For sources, such as Extension, whom horse owners have not preferred in the past (Israel & Wilson, 2006), these results suggest that they need to find a way to make themselves credible and recognizable in the equine industry. Participants prefer to get information from industry insiders and specialists, such as trainers, veterinarians, other owners and enthusiasts, breed associations, and equine magazines. Participants' perceptions of trustworthiness are affected by the source's ability to demonstrate equine-specific knowledge and the source's reputation and success among equine-industry members. Communicators who cannot establish themselves in these ways in the industry should align themselves with other sources that the participants already view as trustworthy, while also emphasizing their other trustworthiness factors, such as their accuracy and honesty.

Perhaps one of the most significant implications of these results is that researchers must have a basic understanding of the channels and sources used by an audience before more detailed communication research is conducted. College-age horse owners and enthusiasts reported using many channels and sources that were not included as answer selections in previous research on horse owners (Israel & Wilson, 2006). Previous research about the channel and source preferences of more traditional CES audiences will not suffice for building a list of possible channels and sources for this audience.

This research serves as a starting point for further quantitative studies, giving researchers a point of reference for surveying horse owners and enthusiasts about which equine-related topics they consider important. It provides a starting description of this unique group of horse owners and enthusiasts. Other groups of college-age horse owners in different geographies and affected by different conditions would likely have some unique channel and source preferences. This group of participants was likely extremely affected by the presence of Texas A&M University, of which most of the participants attended. The group was fairly homogeneous: many participants were members of the same clubs, classes, university majors, activities, etc. Future studies would benefit from studying a more diverse group of horse owners and enthusiasts.

Research of this age group should be conducted frequently to monitor the impact of the Internet and other emerging technologies. Researchers would also benefit from knowing more detail about how horse owners use the Internet, especially as access to Internet becomes more widespread.

CHAPTER IV

SUMMARY

Conclusions

College-age horse owners and enthusiasts can be broken into two groups that have unique interests and information needs: competitive and recreational. In many cases, the competitive and recreational participants found different topics, channels and sources to be important or placed different emphasis on the same topic, channel, or source.

The results indicate that competitive college-age horse owners and enthusiasts were an incredibly specialized group who considered a limited scope of topics to be important. Alternative medical treatments and advanced medicine were important to a group who are pushing their animals to meet the high standards of physical fitness needed to compete at higher levels. These horse owners and enthusiasts put a heightened importance on their microcosm. While they were likely aware that topics such as horse slaughter and cloning will have a significant impact on the industry in which they operate, “who’s who,” tips for fine-tuning in their respective sports, and other specialized information received their immediate attention more than topics that apply a broad scope of horse owners.

Recreational college-age horse owners placed more emphasis on topics with a broader scope, because their interactions with horses required less specialized information. They identified with a larger community and related to a greater number of people, which leads to a more diverse array of topics to catch their interest. Their interest was spread across multiple topics, as they did not have to specialize in one. The

subjects they considered important had more of an “every-day” or “real world” relevance.

Despite being younger than the average horse owner, college-aged horse owners and enthusiasts had an interest in relevant and often controversial topics affecting the equine industry, including emerging medical technologies and political issues such as slaughter, cloning, and national animal identification. These young horse owners and enthusiasts will soon be at the forefront of decision making on these topics. Encouraging their further interest, exploring their current opinions, and involving them in the industry-wide discussions about these topics will be valuable to bridging the gap between generations of horse people and predicting the future climate of the industry.

Groups, such as Extension, interested in communicating and building relationships with college-age horse owners and enthusiasts should be certain that they are addressing the topics that are important and relevant to each audience. Different topics should be emphasized if the communicator has a knowledge of which group their audience more closely identifies with – competitive or recreational.

Texas college-age horse owners and enthusiasts also use multiple channels and sources to access equine-related information. Some channels and sources were important to both competitive and recreational participants, while others were more important to one group.

Face-to-face communication was an important to both groups. Magazines were important to competitive participants, while the Internet was important to recreational participants. Competitive horse owners selected channels that connect them with

trustworthy sources. Being involved in high-level competition demands that the competitive participants have accurate and trustworthy information. They need channels that give them access to many different options, so they can compare and select the information that is reliable and most suited to their respective sports and disciplines. Recreational participants were more interested in convenient and entertaining channels. Because they were not seeking specialized, competition-related information, they were less likely to go out of their way to get information from an inconvenient channel. They wanted practical information that was accessible in convenient ways. Communicators wanting to reach this college-age horse owners and enthusiasts should know if they are dealing with a mixed group or a group that is primarily competitive or recreational so that they can target their information through the appropriate channels. In all circumstances, because participants mentioned multiple channels as important, communicators should broadcast their message across multiple channels.

While previous research has found that agricultural audiences were hesitant to use new communication technologies (Amponsah, 1995; Batte et al., 1990; Brashear et al., 2000; Carter & Batte, 1994; Obahayujie & Hillison, 1988; Rexroad, 2002; Suvedi et al., 1999; Tavernier et al., 1996; Trede & Whitaker, 1998; Tucker & Napier, 2002; Israel & Wilson, 2006), the results of this study show that the Internet is already an important source for college-aged horse owners and enthusiasts, and it will likely only increase in importance. Communicators need to use the Internet as a channel now, especially if they desire to reach college-age recreational horse owners and enthusiasts. While competitive participants are unlikely to use the Internet because they are worried about the

trustworthiness of sources available through it, they also desire more trustworthy sources to be made available through the Internet in the future. If these participants could be convinced of the trustworthiness of a source, it is possible that they would be more likely to use the Internet to access information from that source. Considering the results of this study and national surveys on Internet use (USDC, 2004), further research might show that college-aged persons in other sectors of the agricultural industry also consider the Internet to be an important tool.

The participants' discussion of Internet use suggests that in some instances Internet has influenced the traditional communication models. In all of the traditional models, communication begins with the source and moves through the channels. The models are source driven: source-message-channel-receiver (Berlo, 1960). However, for the participants, the communication process via the Internet was sometimes channel driven. In some instances, the communication process began with the channel, the Internet. The Internet was used to get messages (information). For example, the participants used search engines to search for information on a specific topic. The channel then provided sources to pick and choose from. In instances like these, the emphasis is less on source selection and more on channel selection. From the receivers point of view, the process be interpreted as channel-message-source. The Internet also allows receivers to take a more active role in the communication process. They are no longer restricted by a limited selection of sources and messages. They can compare and select sources and information all in the convenience of their own home, or any place they have access to the Internet.

The results indicate that channel and source selection were related. Competitive participants preferred face-to-face communication, while the participants' personal trainers and veterinarians and fellow competitive owners and enthusiasts were their most preferred sources. It is possible that the participants chose face-to-face communication because it is the best way to get information from these personal sources.

Trustworthiness was important not only when competitive participants selected sources, but also when they determined which channels to use. They preferred channels that linked them with trustworthy sources. Face-to-face communication offers the participant the opportunity to create a firsthand evaluation of the trustworthiness of the source, which is more difficult to do with channels such as the Internet. However it is unclear from this study whether participants choose channels that link them with specific sources, or use specific sources because they are the ones most readily available through the participants' preferred channels. To solve this dilemma, further research on the relationship between sources and channels for this audience is needed.

For sources, such as Extension, whom horse owners have not preferred in the past (Israel & Wilson, 2006), these results suggest that they need to find a way to make themselves credible and recognized in the equine industry. The results do not suggest that Extension is not a knowledgeable source of trustworthy material, but they do suggest that participants are not aware that Extension is a trustworthy and knowledgeable source for equine-related information. Participants prefer to get information from sources they perceive to be industry insiders and specialists, such as trainers, veterinarians, other owners and enthusiasts, breed associations, and equine

magazines. Participants' perceptions of trustworthiness were affected by the source's ability to demonstrate equine-specific knowledge and the source's reputation and success among equine-industry members. Communicators who cannot establish themselves in these ways in the industry should align themselves with other sources who the participants already view as trustworthy, while also emphasizing and informing owners and enthusiasts of their other trustworthiness factors, such as their information accuracy and honesty.

Perhaps one of the most significant implications of these results is that researchers must have a basic understanding of the channels and sources used by an audience before more detailed communication research is conducted. College-age horse owners and enthusiasts reported using many channels and sources that were not included as answer selections in previous research on horse owners (Israel & Wilson, 2006). Previous research about the channel and source preferences of more traditional CES audiences will not suffice for building a list of possible channels and sources for this audience.

Recommendations

This research serves as a starting point for further quantitative studies, giving researchers a point of reference for surveying horse owners and enthusiasts about which equine-related topics, channels, and sources they consider important. It provides a starting description of this unique group of horse owners and enthusiasts.

Other groups of college-age horse owners in different geographies and affected by different conditions would likely have some unique responses. This group of

participants was likely extremely affected by the presence of Texas A&M University, of which most of the participants attended. The group was fairly homogeneous: many participants were members of the same clubs, classes, university majors, activities, etc. Future studies would benefit from studying a more diverse group of horse owners and enthusiasts. Future studies should consider researching horse owners and enthusiasts in different geographies.

When selecting focus group participants, researchers should consider choosing participants who are not familiar with each other or the moderator. If a reliable list exists, participants involved in different groups and activities should be chosen. This researcher found that because the participants knew each other, there was an attempt by some to impress the other participants in the group with their equine knowledge. This was also likely compounded because some of the participants were aware that the moderator had a relationship with the industry expert who referred the participants and was in many cases their coach or professor. Some of the participants were also aware that the moderator was active in the equine industry. All of these factors likely contributed to some of the participants trying to assert themselves as exceedingly knowledgeable about equine-related issues, leading them to at times dominate the discussion and perhaps focus on issues they wouldn't have otherwise. This phenomenon was more evident in the competitive group, so it also possible that it was a result of combining participants who are simply more informed and competitive by nature.

It is recommended that research of this age group should be conducted frequently to monitor the impact of the Internet and other emerging technologies. Researchers

would also benefit from knowing more detail about how horse owners use the Internet, especially as access becomes more widespread. With the rapid rate at which new technologies are adopted, research should be conducted frequently to assess changes. It would also be beneficial to compare this age group's Internet use to other age groups of horse owners and enthusiasts.

Future quantitative studies should be conducted looking at a larger number of owners and enthusiasts to test the results of this study and compare different groups of owners. However, these studies would benefit from beginning with a focus group such as the one conducted to establish the topics, sources, and channels that the audience considers important. This would help to ensure that important topics, sources, or channels are not omitted from answer selections in quantitative instruments.

REFERENCES

- Alfaro, E. M. T. (2004). *Perceptions of livestock Extension delivery and globalization effects among dairy farmers in the north coast of Honduras*. Unpublished masters thesis, University of Florida, Gainesville.
- American Horse Council Foundation. (2005). *The economic impact of the Texas horse industry*. Washington, DC: American Horse Council Foundation.
- Amponsah, W. A. (1995). Computer adoption and use of information services by North Carolina commercial farmers. *Journal of Agricultural and Applied Economics*, 27(2), 565-576.
- Batte, M. T., Schnitkey, G. D., & Jones, E. (1990). Sources, uses, and adequacy of marketing information for commercial Midwestern cash grain farmers. *North Central Journal of Agricultural Economics*, 12(2), 187-196.
- Berg, B. L. (2001). *Qualitative research methods for the social sciences*. Boston: Allyn & Bacon.
- Berlo, D. K. (1960). *The process of communication: An introduction to theory and practice*. New York: Holt, Rinehart and Winston.
- Boone, K. M., & Zenger, S. (2001). Preferred communication channels of homemakers. *Journal of Applied Communications*, 85(4), 19-35.
- Brashear, G. L., Hollis, G., & Wheeler, M. B. (2000). Information transfer in the Illinois swine industry: How producers are informed of new technologies. *Journal of Extension*, 38(1). Retrieved July 9, 2008, from <http://joe.org/2000february/rb4.html>

- Bruening, T. H. (1991). Communicating with farmers about environmental issues. *Journal of Applied Communications*, 75(1), 35-41.
- Caldwell, A. E., & Richardson, J. G. (1995). Preferences of a traditional Extension audience for self-directed delivery methods. *Journal of Applied Communications*, 79(4), 31-40.
- Carter, B. R., & Batte, M. T. (1994). Selecting delivery methods for outreach education programs. *Journal of Agriculture and Applied Economics*, 26(2), 473-484.
- Cavinder, C. A., Antilley, T. J., Gibbs, P.G., & Briers, G. (in press). Perceived educational value of two teaching approaches for improving knowledge of youth leaders and team coaches. *Journal of Extension*.
- Coulson, N. S. (2002). Sources of food safety information: Whom do adolescents trust? *Appetite*, 38, 199-200.
- Denniston, D. J., & Callahan, M. (2005). The effectiveness of an equine Extension website in delivering important 4-H horse project information to youth, leaders, and Extension agents. *NACTA Journal*, 49(3), 30-34.
- Dillman, D. A. (2000). *Mail and Internet surveys: The tailored design method*. New York: John Wiley & Sons, Inc.
- Ford, S. A., & Babb, E. M. (1989). Farmer sources and uses of information. *Agribusiness*, 5(5), 465-476.
- Gamon, J. A., Bounaga, L., & Miller, W. W. (1992). Identifying informational sources and educational methods for soil conservation information used by landowners of highly erodible fields. *Journal of Applied Communications*, 76(1), 1-5.

- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago: Aldine.
- Gibbs, P. G., Potter, G. D., Jones, L. L., Benefield, M. , McNeill, J. W., Johnson, B. H., et al. (1998). *Report on the Texas horse industry*. Retrieved April 27, 2007 from the Texas A&M University Animal Science Department Web site:
<http://animalscience.tamu.edu/sub/academics/equine/hrg014-industry.pdf>
- Heath, R. L., & Bryant, B. (2000). *Human communication theory and research: Concepts, contexts, and challenges*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Hunt, S., & Frewer, L. J. (2001). Trust in sources of information about genetically modified food risks in the UK. *British Food Journal*, 103(1), 46-62.
- Israel, G. (1991). Reaching Extension's clientele: Exploring patterns of preferred information channels among small farm operators. *Southern Rural Sociology*, 8, 15-32.
- Israel, G. D., & Wilson, K. M. (2006). Sources and channels of information used by educational program clients. *Journal of Applied Communications*, 90(4), 55-78.
- Jones, E., Batte, M. T., & Schnitkey, G. D. (1989). The impact of economic and socioeconomic factors on the demand for information: A case study for Ohio commercial farmers. *Agribusiness*, 5(6), 557-571.
- Kaufman, R. (1975). *Needs assessment – What it is and how to do it*. San Diego, CA: University Consortium for Instructional Development and Technology.

- Kromm, D. E., & White, S. E. (1991). Reliance on sources of information for water-saving practices by irrigators in the high plains of the U.S.A. *Journal of Rural Studies*, 7(4), 411-421.
- Krueger, R.A. (1994). *Focus groups: A practical guide for applied research*. Thousand Oaks, CA: Sage Publishing.
- Lasley, P., Padgitt, S., & Hanson, M. (2001). Telecommunication technology and its implications for farmers and Extension service. *Technology in Society*, 23, 109-120.
- Lazenby, W. L. (2005). *Informal and formal channels of communication preferred and used in the adoption of ranching practices by livestock producers in the state of Nuevo León of northeastern Mexico*. Unpublished doctoral dissertation, Texas A&M University, College Station.
- Licht, M. A. R., & Martin, R. A. (2006). Iowa corn and soybean producers' use of communication channels. *Journal of Applied Communications*, 90(4), 19-38.
- Lichtenberg, E., & Zimmerman, R. (1999). Information and farmers' attitudes about pesticides, water quality, and related environmental effects. *Agriculture, Ecosystems and Environments*, 73, 227-236.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass Publishers.
- Nickens, J. M., Purga, A. J. III, & Noriega, P. P. (1980). *Research methods for needs assessments*. Washington, D.C.: University Press of America, Inc.

Obahayujie, J., & Hillison, J. (1988). Now hear this! *Journal of Extension*, 26(1).

Retrieved July 9, 2008 from <http://www.joe.org/joe/1988spring/a6.html>

Ortmann, G. F., Patrick, G. F., Musser, W. N., & Doster, D. H. (1993). Use of private consultants and other sources of information by large cornbelt farmers.

Agribusiness, 9(4), 391-402.

Patrick, G. F., & Ullerich, S. (1996). Information sources and risk attitudes of large-scale farmers, farm managers, and agricultural bankers. *Agribusiness*, 12(5), 461-471.

Rexroad, T. D. (2002). *Evaluation of marketing methods used to promote Extension programs as perceived by master gardeners in West Virginia*. Unpublished masters thesis, West Virginia University.

Richardson, J. G. (1989). Extension information delivery methods: Detecting trends among users. *The ACE Quarterly*, 72(1), 23-27.

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). Farmers' preferences for methods of receiving information on new or innovative farming practices. *Journal of Agricultural Education*, 30, 7-13.

Rollins, T. J., Bruening, T. B., & Radhakrishna, R. B. (1991). Identifying Extension information delivery methods for environmental issues. *Journal of Applied Communication*, 75(2), 1-9.

Sale of Horsemeat for Human Consumption, Texas. (1991). Agric. §149.

- Schnitkey, G., Batte, M., Jones, E., & Botomongo, J. (1992). Information preferences of Ohio commercial farmers: Implications for Extension. *American Journal of Agricultural Economics*, 74(2), 486-496.
- Schramm, W. (1954). How communication works. In W. Schramm (Ed.), *The Process and Effects of Mass Communication* (p. 3-36). Urbana, IL: University of Illinois Press.
- Shannon, C. E., & Weaver, W. (1949). *The mathematical theory of communication*. Urbana: University of Illinois Press.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.
- Suvedi, M., Campo, S., & Lapinski, M. K. (1999). Trends in Michigan farmers' information seeking behaviors and perspectives on the delivery of information. *Journal of Applied Communication*, 83(3), 33-50.
- Tavernier, E. M., Adelaja, A. O., Hartley, M. P., & Schilling, B. (1996). Information technologies and the delivery of Extension programs. *Journal of Agricultural & Food Information*, 3(4), 75-85.
- Texas A&M University. (2007). *Enrollment profile fall 2007*. Accessed December 12, 2007 from: http://www.tamu.edu/opir/reports/ep/epfa2007_certified.pdf
- Tucker, M., & Napier, T. L. (2002). Preferred sources and channels of soil and water conservation information among farmers in three Midwestern US watersheds. *Agriculture, Ecosystems and Environment*, 92, 291-313.

- Trede, L. D., & Whitaker, S. (1998). Perceptions of Iowa beginning farmers toward the delivery of education. *Journal of Applied Communications*, 82(4), 22-33.
- United States Department of Agriculture. (2004). Texas State and County Data. In *2002 Census of Agriculture*. Accessed December 6, 2007 from:
<http://www.nass.usda.gov/census/census02/volume1/tx/tx1intro.pdf>
- United States Department of Agriculture. (2005). *Equine 2005. Part II: Changes in the U.S. equine industry, 1998-2005*. Accessed April 27, 2007:
http://nahms.aphis.usda.gov/equine/equine05/equine05_report_events.pdf
- United States Department of Commerce. (2004). *A nation online: Entering the broadband age*. Accessed April 27, 2007 from:
<http://www.ntia.doc.gov/reports/anol/NationOnlineBroadband04.pdf>
- Wingenbach, G. J., & Rutherford, T. A. (2005). Trust, bias, and fairness of information sources for biotechnology issues. *AgBioForum*, 8(4), 213-220.
- Wingenbach, G. J., & Rutherford, T. A. (2006). National agricultural and Texas journalists' attitudes toward and information sources for biotechnology issues. *AgBioForum*, 9(1), 42-50.

APPENDIX A
FOCUS GROUP GUIDE

Introduction

Thank you for taking time out of your weekend to participate in this focus group. You have been asked to participate in this study because someone identified you as an opinion leader in the equine community among college-aged horse owners and enthusiasts. This makes what you have to say extremely valuable. Your input today is critical to this research and will help educators, organizations, businesses, and others who are looking to communicate in the equine industry.

Your participation in this study is purely voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University being affected.

You may contact me at XXX-XXX-XXXX or XXXXXXXX for more information about this study.

If you have questions about the rights of participants in this study or about the manner in which the study is conducted, you can contact the offices of the Human Subjects' Protection Program and/or the Institutional Review Board at Texas A&M University at (979) 458-4067 or irb@tamu.edu.

Before we start, I would like to quickly go over some of the background of this project.

The horse industry is a sector of the livestock industry that deserves special attention. While horses are technically considered livestock, their owners often see them

as much more and are willing to spend their time and resources on the animals they consider to be pets, performance athletes, and companions.

The horse industry in Texas is a multi-billion dollar industry involving many Texans. An audit of the Texas horse industry revealed that over 1 million horses (15% of all horses in the United States) and almost 300,000 horse owners reside in the state. The industry has a net impact of over \$11 billion annually on the Texas economy. The state is the nation's leader in the number of registered American Quarter Horses, American Paint Horses, Appaloosa Horses, and American Miniature Horses. The audit reports that horse owners in the state keep their horses for various reasons including improved quality of life, relaxation, physical fitness, competition, value for children, to buy and sell for profit, to train for profit, and to breed.

To communicate with the horse owners and enthusiasts who make up the backbone of this important industry, more needs to be known how they gather equine-related information.

What you have been asked to participate in today is a focus group. I want to go over some of the focus group procedures so that we can have the best experience possible.

First, because all of your comments are important, please speak one at a time. Second, I ask that you all respond in turn to the first two questions. After that, please speak whenever you want. If you have been quiet for time, I may call on you. Please remember that there is no right or wrong answer to any of these questions. Anything you have to say that is on topic is valuable and may spark an idea in someone else's mind.

I am the moderator for this focus group. As the moderator, I am very interested in what you have to say, but I will not be agreeing or disagreeing with any of your comments. We'll end this focus group at ____ (1 hour from starting time). After the focus group you are welcome to stay for a free lunch (/dinner). Alright, let's get started.

Questions

1. Let's go around the table and have every one state their name and in what way they are involved with horses.

2. How important are horses to you and why?

3. What horse-related topics are important to you?

4. These are the topics that have been mentioned: ____ (repeated topics or topics that receive affirmation from other participants). How do you get information about these topics?

(a) Where do you go when you have a question about horses, or when you have a horse related problem that you need to solve?

(b) Do you go to different places to get information about different topics?

(c) Are there any others that haven't been mentioned?

5. Here are some of the ways of getting information that have been listed: ____ (repeated sources/channels or sources/channels that receive affirmation from other participants).

Why do you prefer these?

(a) Why do you choose these over other ways of getting information?

6. What characteristics make an information resource a trustworthy one?

(a) Why do you value/trust the information that you get from these particular information points?

7. How do you think other horse owners would rate you as an information resource for horse-related issues and why?

(a) How often do other people come to you for horse related information?

(b) How confident do you feel in giving them answers?

Conclusion

Our one hour has expired for our group here today. I'd like to thank you for all of your valuable comments. Your input has made this research possible.

I have short questionnaire for each of you to fill out. After you're done, please hand it to me. To remind you, the results of the questionnaire will remain confidential. Your name will not be published linking you with your responses. Also, there is a free lunch (/dinner) available for each of you and a gift bag to show you how much I appreciate your participation.

If you have any questions please let me know.

APPENDIX B
COMPETITIVE QUESTIONNAIRE

Name:

1. How long have you been involved with horses?

2. Do you have any horses that you consider to be yours?

If yes, how many?

Who purchased any horse(s) you have now?

3. Have you ever purchased your own horse?

4. Are you involved with horses that do not belong to you?

If yes, please describe.

5. Currently, what portion of your horse-related expenses do you personally finance?

If you do not finance a portion of your horse-related expenses, who else finances it?

5. Describe your day-to-day or weekly interactions with horses.

6. What disciplines do you practice?

7. What competitions or professional equine activities do you participate in?

8. How often do you participate in competitions or professional equine activities?

9. How long have you been participating in competitions or professional equine activities?

10. Are you a student?

If you are a student, what is your major?

If you have graduated from a college or university, what was your major?

11. Do you currently work?

If you work, do you work part-time or full-time?

What is your job title?

12. Have you ever held a horse-related job in the past?

If yes, please list:

13. Would you like to work in the equine industry in the future?

If yes, what would you like to do?

14. Do you pay any equine professionals for their services?

If yes, please list the types of professionals you use.

APPENDIX C
RECREATIONAL QUESTIONNAIRE

Name:

1. How long have you been involved with horses?

2. Do you have any horses that you consider to be yours?

If yes, how many?

Who purchased any horse(s) you have now?

3. Have you ever purchased your own horse?

4. Currently, what portion of your horse-related expenses do you personally finance?

If you do not finance a portion of your horse-related expenses, who else finances it?

5. Describe your day-to-day or weekly interactions with horses.

6. Are you a student?

If you are a student, what is your major?

If you have graduated from a college or university, what was your major?

8. Do you currently work?

If you work, do you work part-time or full-time?

What is your job title?

9. Have you ever held a horse-related job?

If yes, please list:

10. Would you like to work in the equine industry in the future?

If so, what would you like to do?

11. Do you pay any equine professionals for their services?

If so, please list the types of professionals you use.

APPENDIX D
DEMOGRAPHIC SUMMARY

Table 2. *Summary of Participants' Equine Involvement*

Characteristics	Competitive Participants	Recreational Participants	Total Participants
Years of participant involvement with horses			
10 to 15 years	3	3	6
15 to 9 years	3	2	5
20 years or more	2	5	7
Horses claimed by participant			
0 horses	0	4	4
1 to 3 horses	6	3	9
4 to 5 horses	2	2	4
More than 5 horses	0	1	1
Purchaser of currently claimed horses			
Participant	1	1	2
Participant and parent	4	2	6
Parent	3	2	5
Employer	0	1	1
N/A	0	4	4
Participant has ever purchased own horse			
Yes	5	4	9
No	2	5	7
Contributed to purchase	1	1	2
Financing party of horse related expenses			
Participants	2	2	4
Parents	3	2	5
University	0	1	1
Participants and parents	3	2	5
Participants and university	0	2	2
Participants and employer	0	1	1

VITA

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