OKLAHOMA STATE UNIVERSITY FRESHMAN-LEVEL STUDENTS' TRUST IN SOURCES FOR INFORMATION ABOUT AGRICULTURE

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CHAPTER I

INTRODUCTION

Background and Setting

Donlevy (2004) suggested “there are many young people today with little understanding of basic facts concerning food, how it grows and how it reaches the dinner table” (p. 326). The youth of today are far removed from the farm. “Over 98% of the U.S. citizens do not live on a farm or are not engaged in production agriculture” (American Farm Bureau Federation Food and Farm Facts, 2011). Furthermore, Donlevy (2004) explained educational programming and the ability to educate young people about agriculture would be one of the most important aspects of success for the industry into the deep future.

Consumers, specifically agriculturally educated young people, must be informed about the agricultural industry and gain their information from credible sources (Meijerink & Roza, 2007). A growing interest by consumers to understand where and how food is produced has led to changing legislation for the U.S. agricultural industry for decades (The Center for Food Integrity, 2011).

Increased media coverage concerning the safety and quality of the domestic and international food supply has increased awareness among consumers about the food supply (Verbeke, 2005). According to Golodner (1993), “consumers commonly make purchasing decisions in response to messages that appear on labels or claims in

advertisements seen in magazines and on TV" (p. 130). Agricultural communicators must use these media to reach consumers (Donlevy, 2004).

Agricultural communications is one segment of a large range of science-based communication (Ruth, 2005). While agriculture is critical to American economic, environmental and cultural growth, agricultural news is a neglected topic in the mainstream news media (Stringer & Thompson, 1999). Some of the most important science communication issues in the last century have developed from agricultural issues (Donlevy, 2004). Coon and Cantrell (1985) explained "the public's image of agriculture is a kaleidoscope of leftover attitudes and images of what agriculture was in the '40s, '50s and '60s" (p. 22).

To understand today's agricultural production systems, researchers must understand and acknowledge where consumers, specifically young people and incoming college freshman-level students, go for trustworthy information about agriculture. Lewicki, McAllister, and Bies (1998) explained "The view of trust as a foundation for social order spans many intellectual disciplines and levels of analysis" (p. 438). Understanding why people trust and how that trust shapes social relations is critical in understanding how and why those relations affect future decisions (Lewicki et al., 1998).

Scholars saw trust as an important and essential ingredient for a healthy personality (Hazan & Shaver, 1994). Researchers of trust within organizations have focused research on understanding how efficient trust is and how to explain its importance (Kramer & Tyler, 1996). To form beneficial relationships with young people, industries should attempt to understand the need for trusted information by their consumers (Smith & Barclay, 1997).

Determining what trustworthy views young people have and the news media that have the highest trustworthiness will allow researchers to determine what areas to target with a given message and how to begin forming positive relationships with consumers. Specifically, Hill and O'Hara (2006) stated that "developing a relationship with somebody often involves acquiring an overall residual sense of how trustworthy the person is, as well as a specific trust and distrust" (p. 4). They further explained that leaders and "policymakers should not be forced to take an all-or-nothing positions regarding the desirability of interpersonal trust" (p. 4).

Statement of Problem

Researchers must understand what sources of information are deemed trustworthy by young people for agricultural information, so specific advertisers and those wishing to distribute the message of agriculture know how to target this generation (Pettingill, 2006). Little is known about what sources millennials (Meyers & Sadaghiani, 2010), specifically freshman-level students in the College of Agricultural Sciences and Natural Resources at Oklahoma State University, trust for information on agriculture.

A need exists to determine what sources students use to gain information related to agriculture. Adolescence and young adulthood are critical transition periods for civic and political socialization (Jennings & Stoker, 2004). Civic participation in youth and early adulthood stimulates long-term engagement (Jennings & Stoker, 2004), and school and family experiences contribute to the process (Romer, Jamieson & Pasek, 2009).

To communicate accurate and trustworthy messages about the U.S. food supply and to understand the level of trust among young consumers, information must be gathered that shows millennials attitudes on trust and trustworthiness for news and

information specifically related to agriculture (Pettingill, 2006). To gauge what claims and advertisements would be effective, researchers must learn what specific messages and what specific messengers are deemed trustworthy or garner the highest level of trustworthiness (Golodner, 1993).

National Cattlemen's Beef Association Director of Communications Mike Deering explained "to guide those involved and uninvolved in agriculture about the importance of agriculture in the media, research must determine what sources young people trust and believe as well as how those sources help to shape their beliefs and opinions about agriculture (M. Deering, personal communication, January 18, 2012).

Young people put trust and belief in different areas; "millennials are concerned with making a contribution, they also place a high value on professional growth that enables them to take on high impact assignments" (Eddy, Scweitzer & Lyons, 2010, p. 283).

Significance of Study

The agricultural industry needs to stay ahead of the curve in terms of producing trustworthy voices for production agriculture (M. Deering, personal communications, January 18, 2012). The ability to see what information future agricultural leaders trust and believe is imperative to the industry's future success (Schimmelpfennig, Pray, & Brennan, 2004). Studying freshman-level agricultural students will allow research to show what future agricultural leaders deem trustworthy for news and information on agriculture (Barbuto & Burbach, 2006).

Marketing, educational and political strategies, and objectives in agriculture are aimed at young people more and more each day (Weber, Story & Harnack, 2006).

Determining what sources are most highly trusted will allow marketers of different messages to rely on sources that are commonly deemed credible and will help marketers decide where to advertise or aim their efforts (Golodner, 1993).

By looking into the ideas of publications, people, organizations, and online and broadcast news media, researchers will be able to tell what types of sources are most highly trusted (Connaway, 2009) for information relating to agriculture. Information related to agriculture that is believable and trusted is in high demand (Donlevy, 2004). Millennial-aged students are confused about whom they should trust and why they should trust them (O'Neill, 2002). Once a reported level of trust is determined for organizations, people, publications and online and broadcast media, researchers should know how to guide agricultural communicators on where and how to place marketing and message efforts to reach specified students (M. Hendricks, 2011b) and members of the millennial generation for news and information on agriculture.

Purpose

The purpose of this study was to determine the perceived trust level freshman-level students in the College of Agricultural Sciences and Natural Resources at Oklahoma State University had for selected sources of news and information on agriculture.

Objectives

The specific research objectives guiding this study were:

1. To identify the personal and academic characteristics of students included in the study: respondents' residence prior to attending Oklahoma State University, respondents' social media usage, respondents' organizational

involvement, respondents' sex, respondents' political ideology, respondents' major, and respondents' home state or home country.

2. To determine students' level of trust for selected people.
3. To determine students' level of trust for selected organizations.
4. To determine students' level of trust for selected publications.
5. To determine students' level of trust for selected online and broadcast media.

Scope of Study

The scope of this study was limited to freshman-level students in the College of Agricultural Sciences and Natural Resources at Oklahoma State University during the fall 2011 semester. Participant responses were obtained in the freshman-level AG 1011 Ag Orientation class in the College of Agricultural Sciences and Natural Resources during the first week of the fall 2011 semester (N = 500).

Assumptions

The following assumptions were made regarding this study:

1. The participants were honest about their level of trust regarding the people, organizations, publications, and broadcast and online media presented.
2. Participants accurately reported their self-reported information so it could be used as their true answers to the questions presented to them.
3. The participants in this study understood the directions of how to complete the instrument, and the researchers did not in any way influence their answers.
4. The participants were freshman-level students in the College of Agricultural Sciences and Natural Resources at Oklahoma State University and were at least 18 years old at the time the study was conducted.

Limitations

The following limitations were considered:

1. Data collection was limited to freshman-level participants who attended their AG 1011 Ag Orientation class during the first week of the fall semester of 2011 when the instrument was distributed in their AG 1011 classes. The first week of classes of the 2011 fall semester when the research was conducted fell on the dates of August 24, 2011, and August 25, 2011.
2. Some participants did not know who or what all the selected publications, people, organizations, and online and broadcast media were.
3. The students' acceptability of trust was different from survey to survey, but the researchers were able to track the most popular answer for trust for each question asked.
4. The results of this study cannot be generalized beyond the selected population.

Definition of Terms

The following terms were operationally defined for use in the study:

Agriculture: the practice of farming, including cultivation of the soil for growing of crops and the rearing of animals to provide food, wool, and other products (New Oxford American Dictionary, 2009).

Behavior: the way in which an animal or person acts in response to a particular situation or stimulus (New Oxford American Dictionary, 2009).

Communication: the imparting or exchanging of information or news (New Oxford American Dictionary, 2009).

Consumer: a person who purchases goods and services for personal use (New Oxford American Dictionary, 2009).

Freshman: A student with fewer than 24 credit hours, enrolled at a university during the fall 2011 semester (OSU 2011-2012 Undergraduate Programs and Requirements, 2011).

Perception: To become conscious of, to observe, to become aware, or to understand with one's mind or senses (Sijtsema, Linnemann, Gaasbeek, Dagevos, & Jongen, 2004).

Mass Media: organizations whose product is information and entertainment (Stone, Singletary, & Richmond, 1999, p. 236).

Trust: confident positive expectations regarding another's conduct (Lewicki, McAllister & Bies, 1998).

CHAPTER II

REVIEW OF LITERATURE

Introduction

Chapter II is a presentation of the literature relevant to this research. The first section describes the background for the study and the theoretical framework. Subsequent sections are agriculture in the media, the public's view of agriculture, the politics of food, and receiving information about agriculture.

Background for the Study

Doerfert (2003) explained that, "with each successive generation removed from the agrarian environment, the general public's knowledge, attitudes and perceptions towards agriculture has seemingly degraded" (p. 2). Donlevy (2004) stated, "there are many young people today with little understanding of basic facts concerning food, how it grows and how it reaches the dinner table" (p. 326) and targeting those groups will be key toward future legislative battles (C. Woodall, Vice President of Government Affairs, National Cattlemen's Beef Association, personal communication, January 10, 2012).

New technology and new media have proved to be valuable weapons in communicating with voters and policy makers (Donlevy, 2004). Any form of media that is positive and reaches the masses by adapting to trends of the next generation will create news (M. Deering, personal communication, January 19, 2012).

The need for positive media coverage and trustworthy news outlets is evident among all consumer groups (Geary, 2005). Media coverage about agricultural policy and the global need for food is one of the most critical issues covered in the media (Clapp, 2009). The ability to reach consumers with a message about agriculture while maintaining their trust is critical to positive media coverage and consumer education (Rippel, 2002).

In addition to positive media coverage, the ability to communicate effectively with and reach policymakers is critical to have public opinion and future policy decisions mesh (Andsager, 2000).

Realizing the importance of positively covering agricultural policy issues in the media and how that relates to trust from consumers, this review of literature will be focused on the theoretical framework of the cognitive theory of trust, agriculture in the media, the public's view of agriculture, the politics of food, and receiving information about agriculture.

Theoretical Framework: The Cognitive Theory of Trust

In early research, scholars associated trust and distrust with the confidence individuals had in others' intentions and motives (Deutsch, 1962). More recently, researchers of trust have focused on understanding the efficiencies of trust and explaining its emergence (Kramer & Tyler, 1996).

To explain efficiencies and emergence of trust, it must be defined. Mellinger (1956) defined trust as an individual's confidence in another person's intentions and motives and the level of sincerity in that person's word. Read (1962), as cited by Lewicki et al. (1998), built on Mellinger's definition of trust, arguing that trust was a relationship

individuals had with others where they expected their interests to be protected and promoted.

In 1995, Hosmer defined trust as one party's optimistic view or expectation of the behavior of others, especially when the other party had to make a decision about how to act under a certain set of conditions. In building on previous definitions, the Lewicki et al. (1998) analysis of trust was defined "in terms of confident positive expectations regarding another's conduct" (p. 439) and then went on to define distrust in terms of "confident negative expectations regarding another's conduct.

Lewicki et al. (1998) clearly defined their use of "another's conduct" as another's words, actions, and decisions – what another person says or does and how he or she makes decisions. Further, they explain "confident positive expectations" as a belief in and a willingness to act upon the basis of another's conduct. On the other side, Lewicki et al. (1998) explained their meaning of the term "confident negative expectations" as a fear of and a desire to buffer or shield oneself from the effects of another's conduct.

More specifically, Hill and O'Hara's (2006) Cognitive Theory of Trust explained that "developing a relationship with somebody often involves acquiring an overall *residual* sense of how trustworthy the person is, as well as a *specific* sense of the person's trustworthiness in particular contexts" (p. 1721). In regards to the idea of trust and distrust, Hill and O'Hara (2006) state that given the "routine coexistence of trust and distrust, policymakers should not be forced to take an all-or-nothing position regarding desirability of interpersonal trust" (p. 1721).

People's assessment of trustworthiness is made using both conscious and subconscious processes (Hill & O'Hara, 2006). Hill and O'Hara explained two types of trust: "trust that" trust and "trust in" trust.

"A person's assessment of another's trustworthiness is sometimes a prediction as to the other's behavior" and is labeled as "trust that" trust (Hill & O'Hara, 2006, p. 1721). For example, "I trust that the pizza delivery man will deliver the pizza I ordered" (Hill & O'Hara, 2006, p. 1721). However, Hill and O'Hara (2006) explained that "we sometimes also assess a more internally based attribute which we label 'trust in' trust: a person will act in a certain manner, either because she is motived by our well-being or because of her values" (p. 1721). For example, "I trust in Emily to repay the $25 she borrowed from me, in part because I believe that Emily believes in repaying her debts" (Hill and O'Hara, 2006, p. 1721).

Hill and O'Hara (2006) further explained that sometimes people trust members of certain groups in ways that limit beneficial interactions within a society. The trust assessments may not be accurate, but members of certain groups "are probably better to appraise and sanction members of their own group than members of other groups" (p. 1722). Further, however, it is explained that in-group trust can also increase problematic interactions within a society (Hill & O'Hara, 2006).

In an attempt to pin-point attributes of trust and trust theory, a study by Rousseau, House, and Thomas-Hunt (1995) suggested that trusts may be a "meso" concept that integrates micro-level psychological processes and group dynamics with macro-level institutional arrangements.

However, agreement exists that trust is important in a number of ways: it enables cooperative behavior (Gambetta, 1988 &Rousseau et al. 1995); promotes adaptive organizational forms, such as network relations (Miles & Snow, 1992); "reduces harmful conflict; decreases transactions costs; facilitates rapid formulation of ad hoc work groups; and promotes effective responses to crisis" (Meyerson, Weick & Kramer, 1996, p. 394).

Trust experts all seem to agree that trust is a state of mind that enables a person to be willed to make himself vulnerable to another (Delhey & Newton, 2002), which means to rely on another person despite a positive risk that the other will act in a way that can harm the truster (Delhey & Newton, 2002; Hill & O'Hara, 2006).

Further, some scholars of trust believe that trust involves nothing more than predictions or confidence about how another will behave (Good, 2000), for example, "I trust that the plumber will come today to fix the sink" (p. 34). The prediction cannot rise to a level of certainty (Guerra, 2002); if one is positive the plumber will come to fix the sink, trust is not the issue (Hardin, 2002).

Other researchers have determined that trust involves confidence that one person will incorporate the truster's welfare into his decision-making (Dunn, 2000). This type of trust infers one has done an involved assessment of the qualities of the person they are choosing to trust (Hill & O'Hara, 2006). Hill and O'Hara (2006) concluded that although law and social norms can work to encourage both types of trust – "trust in" trust and "trust that" trust – intuition in addition to external factors are the basis for trust considerations all together.

The Center for Food Integrity's 2011 Consumer Trust Research stated consumers, in this case incoming college freshmen, need to understand that while the United States'

systems for production have changed and the use of technology has increased, agriculture's commitment to do what is right has never been stronger (Center for Food Integrity, 2011). Organizations have worked to achieve a foundation of young people who understand sustainable balance of agriculture through news and information retrieval about the industry (see Figure 1).

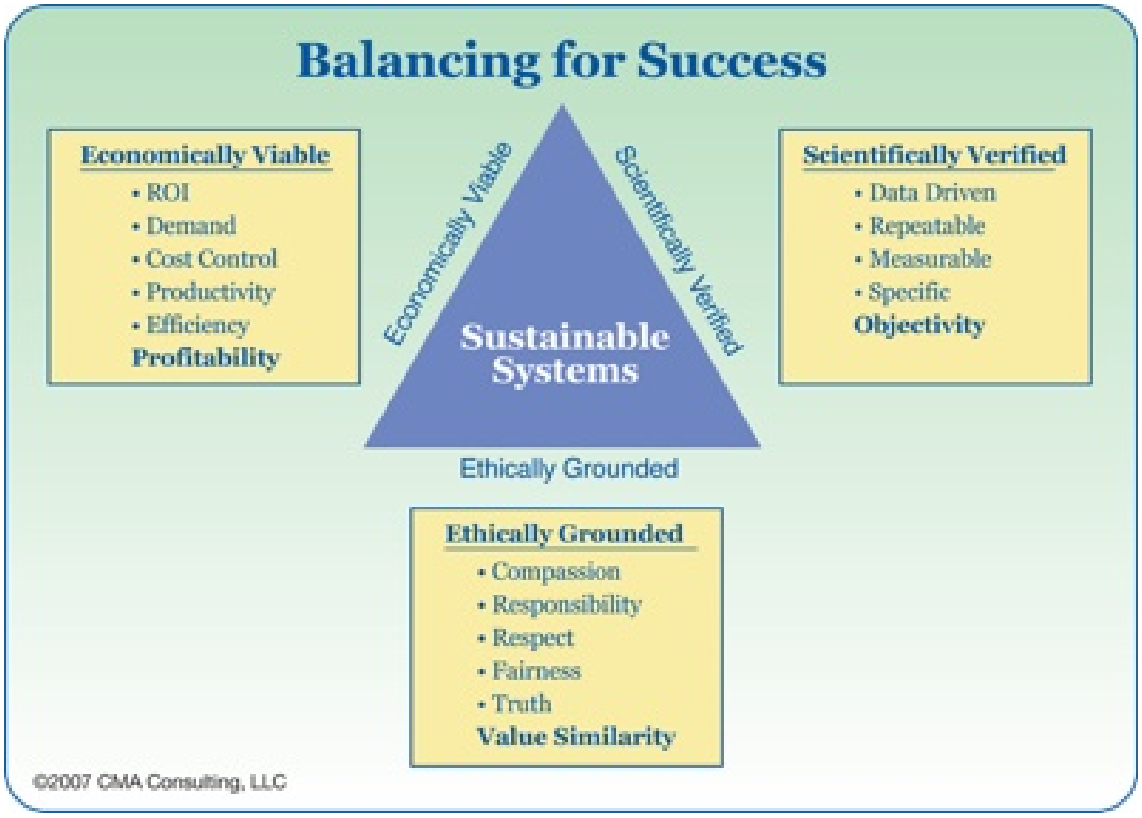

Figure 1

Sustainable Balance for Success and Trust. Adapted from the Center For Food Integrity's 2011 Consumer Trust Research.

Agriculture in the Media

The impact of an industry in the media is based largely on its ability to convey an effective message through public relations (Geary, 2005). In terms of establishing trust,

public relations included “influencing behavior to achieve objectives through the effective management of relationships and communication” (Institute for Public Relations, 2003, p. 10).

Public Relations

Agriculture is one of the many industries acknowledging the value of public relations, especially in economically conscious times (Dvorak, 1992). In discussing the media relations function of public relations, Ruth (2005) explained despite the view that “media relations is not a principal objective function of public relations, most public relations professionals consider media relations strategies as in integral component of public relations efforts” (p. 29) to reach consumers.

With favorability in the media being a critical component to success in the marketplace, agricultural companies are looking to public relations to build and rebuild positive perception about agriculture (Dvorak, 1992). Dvorak (1992) explained, “faced with a constant onslaught of criticism from environmentalists and animal rightists, agricultural companies are looking to public relations to build credibility and goodwill with communities” (p. 28).

While fresh perspectives can be great assets, some studies show that some people like things just how they are. A study that looked at digital versus printed publications received about the dairy business found respondents in the study did not favor the Internet over print sources for obtaining specific information (McCarthy, Beede, & Edgecomb, 2008). Respondents expressed the least level of favorability with downloading PDF files to read – the study showed respondents would rather receive magazines, newsletters and bulletins above all other sources of the same material

(McCarthy et al., 2008). That is why understanding the industry or the audience you wish to reach is important (Bentley, Tinney, & Chia, 2005).

Understanding the industry and the market is even more important if the people managing public relations and perceptions have customer contact (Gasch, 1992). When the public relations professional is on the farm, you are representing the client, thus projecting the right image is important (Gasch, 1992). Shaping positive perception of agriculture in the media comes down to managing the issues, developing a database of information, identifying the issues, assessing the impact of specific issues, formulating a position, formulating a strategy, assessing risk, and developing an action plan (Vogt, 1992). Identifying the issues and assessing their impact can establish trust about the issues by different parties (Vogt, 1992).

The public relies heavily on the media to inform them about a wide variety of agricultural issues. The media gives much of the attention to the stability of a U.S. food supply and the government-implemented plans and procedures to protect such a food supply and industry (Whaley & Tucker, 2004). "As the distance between lay consumers and food producers and processors increases, the most likely source of information on food safety for the lay consumer is the mass media" (Ten Eyck, 2000, p. 45).

Media Coverage of Consumer Concerns

The United States media covers concerns of consumers about agriculture. Concerns of consumers in regard to food production are highest for pesticides and hormones, followed by antibiotics, genetic modification, and irradiation (Hwang, Roe, & Teisl, 2005). Consumers' desire for food that is healthy, safe, and ethically produced often motivates some consumers to purchase organic food (Yiridoe, Bonti-Ankomah, &

Martin, 2005). The U.S. Department of Agriculture (USDA) established the National Organic Program in October 2002 (USDA, 2011). The program was established to assure consumers that organic-labeled products were consistent with a given set of rules and regulations (Abrams & Meyers, 2010).

A qualitative framing analysis of organic food news media coverage found that "organic food production can be viewed as both an ally and rival of traditional agriculture" (Abrams & Meyers, 2010, p. 1). The study employed qualitative content analysis methodology to discover how five national newspapers framed organic foods during an 18-month period (Abrams & Meyers, 2010). "The study found that the emphasis in the media was put on the ethical and moral reasons to purchase organic food, with limited discussion of the scientific evidence for consumer claims of superior quality, safety, and nutrition" (Abrams & Meyers, 2010, p. 1).

In an article discussing coverage of organic agriculture in North American newspapers, Sloan (2002), as cited by Cahill, Morley and Powell (2010), explained that media coverage has influenced consumer perceptions and spending on organic foods and other "green" products. Sloan also acknowledged that "media coverage of pesticides, genetically engineered foods, and environmental degradation might have played a role in influencing consumer spending on organic products (Cahill et al., 2010).

Media professionals such as Mace Thorton, Deputy Director of Public Relations as the American Farm Bureau Federation, explained "it is always essential to hit a target audience where they consume media" (M. Thorton, personal communication, January 20, 2012) just as the article that influenced consumer perceptions regarding organic foods and other "green" products did.

Sanford (2009) explained most media coverage, including the "food series" by the *New York Times* in the summer of 2008, and governmental and economic discussion of food issues "reflect the dominant productionist paradigm in which quantity trumps both quality and the means of production" (p. 181). The written word covered in the media about agriculture depicts different levels of trust in production agriculture (Sanford, 2009).

Beyond the role media can play in influencing public opinion and policy agendas, the broader political and social agenda and climate also are shaped as a process of media and media relations (Crow, 2010). As a result, how agriculture is depicted in the media will determine how consumers view and trust the stances of agriculture on a majority of policy decisions and production ideas (Crow, 2010).

In a 2005 report, John Woodhead explained that companies are looking up and down the supply chain "from farm to fork" to demonstrate their responsibilities to the food industry and in the media. Woodhead (2005) stated:

> Interests about the foods we eat are increasing rapidly. The chain of responsibility is coming under intense scrutiny – the stores where we buy the food, how the food has been produced, what has gone into the food, and what effects the food will have on us (p. 12).

At the center of consumer concerns is the issue of trust – who can consumers trust to meet their expectations (Woodhead, 2005)?

Trust in a given source was the best predictor of how involved the media was in delivering a given message (Woodhead, 2005; Whaley & Tucker, 2004). Those with higher levels of trust in government and expert sources typically expressed higher levels

of reliance on the media for trustworthy information (Whaley & Tucker, 2004). To gain trust and positive perception for the U.S. agricultural industry and identify consumer concerns about their food, the media must use expert sources and cover the story in a positive light to reach the consumer, especially the younger consumer (Whaley & Tucker, 2004).

The Public's View of Agriculture

Communications professionals who work almost exclusively on agricultural policy and political communication know they have to communicate real issues to real people (Lovelock & Gummesson, 2004). When communicating policy issues about agriculture to consumers it is important to remember consumers above all else want safe food (Center for Food Integrity, 2011). Consumers want to know that the policies will allow safe food to show up at the grocery store at an affordable price (M. Thorton, personal communication, January 19, 2012). They also want to know the face behind the policy and the plow – the face of the family famer or rancher (M. Hendricks, 2011a).

Issues like vegetarianism and global warming are the single biggest threats to the health of the planet and play big roles in lobbying agencies across the country (Adler, 2008). As a result, Sebor (2007) concluded that "consumer's trust for products must be gained, and it is important that consumers don't feel censored by a merely sugar-coated advertisement" (p. 34) that promotes a purely positive image of a company, industry or group. From the West Coast to the East Coast, grassroots groups are lining up alongside a mix of scientists and environmentalists, challenging corporations for answers they seek about what is being done to the food they eat, and consumers are really getting involved in their food choices (Gillam, 2002).

Historically, agricultural associations have been guilty of watching the story be told and then reacting to it, and know they must now tell their story (M. Deering, personal communication, January 18, 2012). Groups like the National Cattlemen's Beef Association (NCBA), that have declared *Beef, it's what's for Dinner* as its slogan, are one of the few industry-led trade associations that have successfully marketed a product so central to American cuisine that what their organization asserts as trustworthy or primary is trusted by their consumers (Adler, 2008).

Adler (2008) also explained "green groups tell their constituents to trade in their SUV for a Prius – but haven't dared suggest that they give up steak" (p. 31). Ultimately, the policies and the images displayed in the media and the level of trust they yield by consumers comes down to economics (Wolinsky, 2009).

While all producer groups do not market a product like beef, Livingston (2008) suggested increasing agricultural exports and imports benefits U.S. consumers. The United States and similar nations must use a number of different approaches to reduce risks to agriculture and the food supply (Wolinsky, 2009). The environment in which farmers feed the world needs to be free from pests and diseases to increase trade, and groups that can target these areas positively will be viewed with high favorability and trust in both the media and the eyes of consumers (Wolinsky, 2009).

The same thing can be said about today's agricultural industry. Tucker (2010) stated "big agriculture and agribusiness tend to be portrayed as villains raking in big profits and government subsidies while running roughshod over the environment, farm animals, and often their own workers," (p. 1) and public relations is the tool that could help change those misconceptions.

Agricultural experience and public perception about agriculture is reliant on citizens' interests, beliefs, and perceptions of a product or company (Gasch, 1992). To maintain a market environment that is favorable for agricultural products, manufacturers must be aware of the forces at work (Vogt, 1992).

An important way to shape perception and trust of a company is to "know the issues that are headed your way and how to respond properly" (Vogt, 1992, p. 73). Bill Gnatzig (as cited by Vogt, 1992), manager of agricultural public relations for Colle & McVoy Inc. Minneapolis, said, to display positive public perception "a communicator needs to get inside the head of producers and understand how their business operates. But, there are benefits to the fresh perspective of someone who doesn't have all the agricultural baggage some of us carry around" (p. 8).

Establishing trust among consumers is always a goal of the agricultural industry. Trust in industries can be gained through a variety of programs in agriculture; the impact of vocational agricultural programs and FFA will affect involvement in both community and national leadership (Brannon, Holley & Key, 1989). By having involvement in 4-H and FFA, organization trust is established for the future (Weaver, 1996).

Politics of Food

Agriculture specifically has been one of the most glaring exceptions to the official American preference for free markets (Vanheesan, 2010). One of the main issues behind agricultural policy and the politics of food requiring public relations expertise are the attempts by the United States government to reconcile the tension between price supports and production control (Vanheesan, 2010).

Price supports and production control remain contributors to all other legislation, specifically food abundance (Vanheesan, 2010). The Food and Agriculture Organization of the United Nations (FAO) estimates that food production must increase by at least 70 percent to meet growing demands of a world population expected to grow beyond 9 billion by 2050 (Threats to Food Security, 2010). While food abundance is critical, consumers also have high expectations regarding the environment in which their food is grown and environmental policy (Tweeten & Zulauf, 2002).

To address increased food production rates and constant environmental awareness concerns of consumers, agricultural policy must do more than make food affordable (Wallinga, 2010). Policy issues related to agriculture must now address food safety, food assistance nutrition, and the health risks or benefits associated with food, in addition to an inexpensive food supply (Collier, 2008). The two key parameters shaping food demand and agricultural policy are described by Collier (2008) as "income elasticity and price elasticity. The income elasticity of demand for food is generally around 0.5, meaning that if income rises by 20 percent, the demand for food rises 10 percent " (p. 68).

Collier (2008) addressed food demand and abundance, but not increased environmental concerns. Tweeten and Zulauf (2002) addressed environmental concerns in addition to food abundance stating that low-input, sustainable agriculture of the traditional society contrasts sharply with the perceived environmental deterioration of today. They added "mature societies provide optimism for the environment" (p. 68). Addressing issues of environmental policy and food politics in the media is the difficult task for agricultural institutions (Crow, 2010).

With more attention focused on the environmental importance of agricultural lands, studies have explored factors influencing how producers make decisions about environmental management (Brodt et al., 2004). As all food stakeholders put more emphasis on the environment, Stuart (2009) explained with, “changes in the economic structure of agriculture and food markets, producers may have increasingly limited choices in their management decisions” (p. 54). Hendrickson and James (2005) discussed how consolidation in agriculture constrains the choices of producers and suggested that the chance for erosion of ethics or ethical dilemma for producers may occur.

While Stuart (2009) stated “changes in the structure of agriculture have led to increasing ethical dilemmas for producers and may result in long-lasting changes in acceptable environmental behavior” (p. 55), producers today are producing at the highest and most efficient level of all time with the most strict regulations in history (Kagel, Bates & Gawell, 2007).

Mace Thorton of the American Farm Bureau Federation explained that agricultural communicators “have placed an emphasis on talking more about food, which continues to present a challenge when commodity production programs and the environment are the focus of any given policy” (M. Thorton, personal communication, January 18, 2012).

According to Crow (2010), “media influence on the public’s issues agenda can determine the issues that citizens and policymakers consider important” (p. 145); thus, agriculture’s image in the media will dictate consumer perceptions (M.L Deering, personal communication, January 19, 2012). Verbeke (2005) stated many factors influence the choices, behaviors and trust of consumers. Holt (2010) explained when

unsubstantiated claims of the U.S. agricultural industry were presented to the public or seen by the public, the perceived safety and reliability of the industry was diminished.

Consumer and special interest groups that are portrayed positively in the media are often more effective in communicating with and reaching policy makers (Jarvis, 2010). Grassroots efforts from consumer groups to reach policy makers can lead to future positive policy legislation that is viewed with high trust and reliability (Weaver, 1996). Voters learn from the media (Weaver, 1996). How information is relayed to the public and what they hear in the media moves into their thought processes (Weaver, 1996). Eventually, the thought processes developed by voters affect how they vote in elections (Weaver, 1996).

One way that consumer groups reach voters and policy makers is through new media. New media allows groups to address the gap among food producers and food consumers that is growing larger each day (Donlevy, 2004). In the 2008 Presidential election, Barack Obama used new media technology to win the White House (Jarvis, 2010).

By using new "communication technologies – Facebook, YouTube, Twitter, and online gaming cite advertising" (Jarvis, 2010, p. 801) the Obama campaign reached out to voters who were never previously targeted in presidential campaigns and gained their trust. Agriculture policy groups and interest groups need to do the same because interest group interaction among politicians and voters is powerful (Krozner & Stratmann, 2000).

An example that proved interest groups' power was when the Humane Society of the United States introduced Proposition 2 in California (Goodwin & Rhoades, 2011). Agriculture is California's largest economic industry (Benson, 2008) and that industry

was the target of Prop 2. Opponents of the proposition said in 2008, if passed, Proposition 2 would outlaw nearly all current housing systems for egg-laying hens on California's poultry farms by 2015, potentially wiping out the state's $323 million egg sector (Lee, 2008b).

While the special interest group power was what got the initiative on the ballot, "now that the measure has passed, California egg farmers say there is a huge cloud of uncertainty hovering over the future of their operations and livelihood. Several [producers] said they plan to close their farms" (Lee, 2008a, p. 1). This one proposition passage demonstrated why it is essential that pro-agriculture industry groups must continue to feed regular media points with information, but why they must also make a point to feed new media outlets such as bloggers and other social media platforms (M. Thorton, personal communication, January 19, 2012).

Krozner and Stratmann (2000) developed and researched a theory of "how interest group competition shapes the organization of Congress and used it to explain campaign contribution patterns and financial services" to certain legislative efforts (p. 2). The use of similar tactics by agriculture, in addition to the use of new media to reach new markets, would make a new presence in lobbying and in the eyes of the public (Donlevy, 2004).

By integrating more agricultural producers into policy-making decisions with new media, researchers believe farm revenues and revenues from agribusiness may benefit (Lence & Hayes, 2002). Integration of industry-specific producers into policy-making agendas will influence policy makers and future legislation (Weaver, 1996).

By putting more voters in a voter base who are educated about food, legislative attitudes toward food will change (Weaver, 1996). Since its inception, food has always been a high intensity product (Walsh-Dilley, 2009). Food is high intensity in terms of how it is produced, how it is marketed, how it is sold and, most importantly, how it affects the consumer (Walsh-Dilley, 2009). As a result, consumers are often confused and overwhelmed with brands, products and health, all of which are important aspects of food and the policy that surrounds it (Golodner, 1993).

For important aspects about food to reach the desks of policy makers, interest groups must attempt to share public opinion about food with many competing news policy agendas (Andsager, 2000). Interest group interaction among politicians and voters is powerful (Krozner & Stratmann, 2000).

The ability for special interest groups and other advertisers to reach their intended audience, future consumers of food in the United States, and serve them a specific message is beneficial toward establishing trust and credibility (Krozner & Stratmann, 2000). To educate voters and policy-makers with political action, messages must be on target and concise (Weaver, 1996). To convey the correct message, groups need to understand what consumers think, how they learn and specifically what they learn from the media (Weaver, 1996).

Receiving Information about Agriculture

In an assessment of students at a land-grant university, Rhoades et al. (2008) found that 98.8% of students surveyed in an agricultural program of study owned a computer. This was an increase from results found by Johnson et al. (1999) in a previous study that reported only 62.3% of students at an alternate land-grant university owned a

computer. Once students own a computer, they then have the ability to access the Internet, and as Shrestha, Suvedi and Foster (2011) explained, with increased access to the Internet, websites become one of the most important sources of information.

Yuksel (2010) stated the overwhelming lack of knowledge about agriculture on the part of the general public blended with the development of a business oriented industry in agriculture had produced a great interest and need for agricultural courses to be taught at universities and reach the students through new technology.

A global study in 2010 as conducted by the Nielsen Company said global consumer use on social media sites was up 82%. According to the company's report, "global consumers spent more than five and half hours on social networking sites like Facebook and Twitter in December 2009, an 82% increase from the same time last year when users were spending just over three hours on social networking sites" (The Nielsen Company Global Media Study, 2010).

Besides just new social media platforms on the Internet, in recent years, books addressing various aspects of the food and agricultural industry have proliferated the market (Sanford, 2009). The increased number of publications on agriculture marks an important turn in the 21st century, "because until recently, cheap food and overflowing supermarkets [had] made food and agriculture a non-issue for most North Americans" (Sanford, 2009, p. 181).

Reaching Millennials with Information

The groups of students in the education system today, the millennial generation, were born between 1980 and 1995, and are the children of baby boomers (Ng, Schweitzer & Lyons, 2010). They are often described as the generation that wants it all and wants it

now. However, Telg and Irani (2005) said they lack curiosity to think for themselves and want to be hand-held and spoon-fed.

In a study regarding instructors' social media usage among millennial students enrolled in agriculture at land-grant universities, Settle et al. (2011) explained students used social media for more "out of class discussions than for assignments and communication" (p. 81) directly relating to class material; however, this varied based on different social media platforms. Thompson (2007) stated "social networking sites such as MySpace.com and Facebook.com have had a particularly strong influence in the lives of millions of students" (p. 1).

What does this mean to small businesses and industries trying to market to or reach millennials? First, millennials have shorter attention spans, are better at multitasking, and get bored more easily (Hendricks, 2011b). Second, millennials' lifelong technology bath has changed how they want to receive information; while millennials wouldn't dream of coming into an office for multiple face-to-face meetings, they are happy to sit down in front of their computers and go over the same information in the form of a remote video conference (Hendricks, 2011b).

Millennials desire instant feedback and have a sense of entitlement regarding academic grades that may not reflect their ability or effort; they need support, pampering, and a sense of belonging (Ng et al., 2010). In regards to millennials and their entitlement, Greenberger et al. (2008) explained if students have explained to their professor that they are trying hard, the millennial students think they should have gotten some consideration with respect to their course grades.

On the flip side, millennials desire responsibility and flexibility. They want to make a difference and crave meaningful work and school experience. Therefore, curriculum must be challenging and applicable. "Students need to see that their work has impact" (Telg & Irani, 2005, p. 17). Professors can implement case studies and allow students to debate controversial issues, or add a real-world feel to assignments (Telg & Irani, 2005).

Greenberger et al. (2008) provided several factors that may add to the feeling of entitlement among millennials regarding academics, including a poor work ethic and having little concern for how others are affected by their actions. Another possibility is that academic self-entitlement constitutes a coping strategy for students who experience a decline in grades as they confront the more stringent demands of college and university course work, along with the more academically selective pool of fellow students (Greenberger et al., 2008).

One way to reach the millennial generation is through social media. Social media is sweeping the nation as well as the agricultural community (Hoffman, 2009). A 2009 American Farm Bureau Federation survey of young farmers and ranchers found that of the 92 percent of young farmers and ranchers ages 18 to 35 who used computers, 46 percent of them regularly used social media (Hoffman, 2009).

More recently, a *New York Times* report by Teddy Wayne (2010) stated "Internet users from all age groups increased their use of social networking from December 2008 to May 2010, with use by people 18 to 33 rising to 83 percent, from 67 percent" (p. 1).

Further, as of 2011 Facebook has 500,000,000 active users, which is approximately one in every 13 people on earth (Facebook Statistics, 2011). The Facebook

Statistics 2011 study also stated that 48% of 18 to 34 year olds check Facebook right when they wake up (Facebook Statistics, 2011).

Specifically, the college or millennial demographic of ages 18 to 24 grew the fastest, at 74% in one year (Facebook Statistics, 2011). Facebook Statistics 2011 stated when it comes to news, 48% of young Americans said they find out about news through Facebook. Reaching the millennial generation with agricultural news and information will dictate much of the industry's success in the future (M. Deering, personal communication, January 20, 2012).

Summary

Research on the politics of food, media image and positive public perception about agriculture has reported the importance of positive consumer relations in being depicted positively and favorably in the media (Zaller, 1999). Research also has found policy issues addressing ideas of which consumers are unsure, such as, environmental issues and food safety, will be difficult to display as beneficial and necessary (Geary, 2005).

Ultimately, research points to the lack of practical agricultural understanding by a majority of food consumers (Geary, 2005). Pense and Leising (2004) and NRC (1988) explained that the Committee on Agricultural Education in Secondary Schools began to develop the idea of "agricultural literacy" and they proposed that a person who was agriculturally literate would "understand the food and fiber system in relation to its historical, economic, social, and environmental significance" (Pense & Leising, 2004, p. 86-87).

Frick (1990) reported one of the first conclusive agricultural literacy definitions, where he defined agricultural literacy as "possessing knowledge and understanding of our food and fiber system" (p. 52) and that a person who possessed such knowledge would be able to synthesize, analyze, and communicate basic information about agriculture.

To obtain a positive reception in the media and the marketplace, agricultural organizations and supporters must be diligent in educating consumers about certain practices (Geary, 2005). If consumers trust something is being hidden or sugarcoated, they are much more likely to exhibit signs of disapproval (Geary, 2005).

Agricultural communications professionals explained they think consumers do not gauge their level of trust based on what programs the industry or industries may have in place (M. Deering, personal communication, January 18, 2012). Consumers want to know the industry is checked and rechecked by outside experts from government to universities (M. Thorton, personal communication, January 19, 2012).

Individual people react differently to different sources of information in different and individualized ways (Verbeke, 2005). With this, people will always feel consumers need to research and obtain information on their own (Verbeke, 2005). What those in the agricultural industry deem or perceive as credible or trustworthy relies heavily on how the information is obtained and presented (Verbeke, 2005). To increase consumer knowledge of the U.S. agricultural industry, the media must cover and relay stories of the agricultural sector to a variety of audiences (Ruth, Eubanks, & Telg, 2005).

CHAPTER III

METHODOLOGY

Introduction

The purpose of this chapter is to provide a description of the methods and procedures used to conduct the study. Included in this chapter is the approval of the study by the Oklahoma State University Institutional Review Board, the definition of the research design, a description of the population, and the process of data collection and analysis.

Institutional Review Board

Oklahoma State University policy and federal regulations require approval of all research studies that involve human subjects before investigators can begin their research. The Oklahoma State University Office of University Research Services and the Institutional Review Board (IRB) conduct this review to protect the rights and welfare of human subjects involved in biomedical and behavioral research. In compliance with that policy, this study received review and was granted permission to proceed by the OSU Institutional Review Board on Friday, August 19, 2011. The IRB application number assigned to this study was AG1140 (see Appendix A).

Research Design

This research used a descriptive methodology to determine OSU CASNR incoming freshman students' level of trust for a given set of sources on news as it related to agriculture. Best (1970) defined descriptive research as:

> Describes and interprets what is. It is concerned with conditions or relationships that exist; practices that prevail; beliefs, points of view, or attributes or relationships that are held; processes are going on, effects that are being felt; or trends that are developing. The process of descriptive research goes beyond the mere gathering and tabulation of data. It involved an element of analysis and interpretation of the meaning of significance of what is described (p. 116).

Descriptive research methodology was used for this study to analyze the students' level of trust in selected sources. In addition, how the level of trust differed among the population based on a student's background or a given set of specific student characteristics was analyzed.

Quantitative data for this study were collected via a survey instrument. The instrument was administered to all sections of the AG 1011 Introduction to Agriculture seminar class at Oklahoma State University in the College of Agricultural Sciences and Natural Resources during the first week of the 2011 fall semester.

Population

Bartlett, Kotrlik, and Higgins (2001) explained that a common goal of survey research is to collect data of a target population. The target population for this study was comprised of Oklahoma State University freshman-level students who were enrolled in majors in the College of Agricultural Sciences and Natural Resources; attended their

section of AG 1011 during their second day of class when the instrument was administered; and opted to participate in the study and voluntarily return the data collection instrument to the researcher.

Oklahoma State University describes the opportunities available to this study's population in the College of Agricultural Sciences and Natural Resources as 16 majors and more than 50 study options (OSU CASNR, n.d.). A career in science, business, education, natural resources or communications could be in the future through an excellent education and experiences attainable through CASNR (OSU CASNR, n.d.).

This study surveyed the population to gather data from students for given sources for agricultural news information. The National Statistical Service (2011) described the population in a research study as:

> The aggregate or collection of units about which the survey will be conducted. Units can refer to people, households, schools, hospitals, businesses, etc. There are two different populations that a survey is concerned with. We have a *target population*, the group of units about which information is wanted, and a *survey population*, the units that we are able to survey (p. 1).

Ideally, the survey population should correspond exactly with the target population (National Statistical Service, 2011), and in the case of this research study, the target population and the survey population did correspond exactly.

Salant and Dillman (1994) and Glasow (2005) explained that defining the target population as narrowly as possible yields the most exact results. While it is not often possible to know the true population, when the option of gaining responses from a true

population is available, the research should move in the direction of surveying a true population (Glasow, 2005).

Karemer (1991) identified three distinguishing characteristics of survey research when surveying a population. First, survey research should be used to quantitatively describe specific aspects of the given population. Second, the data required for the survey research will be collected from people, and therefore, are subjective. Finally, Kraemer (1991) explained how a determined population could explain trends among similar populations.

Surveys are capable of obtaining information from large groups of the population and are well suited to gather demographic data to describe the population (McIntyre, 1999). Glasow (2005) explained that once the population is determined, the limits and definitions of the research population need to be established and then the size needs to be evaluated to determine how many subjects or objects it includes. In this case, the population includes OSU CASNR freshmen.

Data Collection

Instrument Design

The instrument for the study was designed to measure the level of trust of Oklahoma State University freshman-level students studying in the College of Agricultural Sciences and Natural Resources for specified people, publications, organizations, and online and broadcast news media.

The instrument was created in five sections: organizations, people, publications, and online and broadcast media as well as a section on student characteristics (see Appendix B). The instrument was developed from a similar instrument used in classes

conducted by Dr. Robert Terry Jr. at Texas Tech University and Dr. James Christiansen at Texas A&M.

Since OSU CASNR freshman were surveyed, the instrument was changed to include Oklahoma-specific sources, and the instrument was adapted and changed to allow for students to self-report information not only on trust of sources but also selected biographical information.

Within the instrument, 40 questions were asked about level of trust. Respondents completed 10 items each for selected people, publications, organizations, and online and broadcast news media to indicate their level of trust for each source as it related to news and information on agriculture. The instrument also included seven questions regarding selected personal and background information.

The first 40 questions of the instrument were focused on assessing the level of trust for selected sources and used a five-point response scale with choices of 1 = almost never trust, 2 = occasionally trust, 3 = trust about half the time, 4 = frequently trust, and a response of 5 = almost always trust. Further, a sixth option of NH allowed respondents to opt out if they had never heard of the source.

The seven questions relating to student characteristics offered either a set of answers from which the respondent could select one or as many as pertained as well as open-ended responses where the respondent completed an answer.

Responses for the study were collected via a printed instrument administered at one time by the researcher. The front page of the survey was a tear-off participant information data sheet (see Appendix A), and the formal instrument was a one-page, two-

sided document where the respondents completed their selected answers (see Appendix B).

Validity and Reliability of Instrument

Creswell (2002) explained that validity and reliability are two important considerations in developing and conducting research. Creswell (2002) explained validity refers to the strength of a researchers' conclusion and is described as how accurately the research instrument measures the content that is intended to be measured by the study. Further, Creswell (2002) showed reliability referred to the consistency of the measurement tool.

Validity

As prescribed by Tuckman (1978), the instrument was reviewed by a panel of experts within the College of Agricultural Sciences and Natural Resources at Oklahoma State University to establish content and face validity.

The instrument was reviewed by a panel of experts consisting of five faculty members from Oklahoma State University. Four of the faculty members were from the agricultural education, communications, and leadership department and one faculty member was from the animal science department (see Appendix C).

The panel of experts was assembled to ensure face and content validity. The panel of experts offered their opinions and suggestions for the content and layout of the instrument. Each expert was selected based on his or her experience and knowledge in the area of the agricultural industry, especially dealing with agriculture in the media, agricultural leadership programs, and agricultural policy. After reviewing the instrument, the panel discussed and critiqued the instrument with the principle researcher.

Suggestions for improvement of the instrument focused on ease of use for respondents, ease of reading the instrument, specific wording and titles of sources, and layout and design of student characteristic questions. Finally, only the primary researcher and the faculty committee chair who guided the research made revisions to the instrument.

Reliability

The Department of Psychology at Georgetown University in 2011 explained the idea of determining reliability through a test. A test for reliability is valid when it measures what it is intended to measure. How valid a test is depends on its purpose—for example, a ruler may be a valid measuring device for length but not a very valid for measuring volume (Georgetown University, 2011).

If a test is reliable, it yields consistent results. A test can be both reliable and valid, one or the other, or neither. Reliability is a prerequisite for measurement validity (Georgetown University, 2011).

The researchers tested the reliability of the instrument by conducting a pilot study. The pilot study included 42 respondents who were incoming freshman-level agriculture students. Pilot study respondents were surveyed at the 2011 California State Fair and Exposition during the 2011 summer semester. This group was selected for the pilot study because of its similarity to the target population. Pilot study respondents were also incoming freshman-level students who planned to study agriculture and who had not experienced any formal university influence through agricultural coursework.

Members of the pilot study were surveyed during breed association meetings at the annual California State Fair and Exposition during the week of July 10-16, 2011. The

pilot study instrument (see Appendix D) explained the purpose of the study and encouraged participants to take the time to complete their self-reported information on level of trust for the given sources and student characteristic information.

Forty-two of the 50 instruments given to the pilot group were returned to the researcher, resulting in a response rate of 84%. Data from the pilot study was used to calculate Cronbach's alpha levels for the data on scaled items. The Cronbach's alpha coefficient is a measure used to estimate the consistency of scales used in survey data research (Glasow, 2005) and a coefficient of .70 or higher is preferred to make the data safely reliable (J. Penn, personal communication, August 8, 2011).

Cronbach's alpha coefficient levels were run separately for each group of selected sources for which respondents were asked to gauge their level of trust. The coefficient for the pilot study category on people was .86. The coefficient for the pilot study category on organizations was .71. The coefficient for the pilot study category on publications was .83. The coefficient for the pilot study category on online and broadcast news media was .81. As such, each section of the instrument was deemed reliable.

Administration of Instrument

The instrument was administered to the subjects during the first week of the fall 2011 semester. The data were collected in all seven sections of AG 1011 Orientation to Agriculture. Permission to do so was obtained from Dr. Cheryl DeVuyst, the instructor of the course.

At the beginning of every class section, Dr. DeVuyst introduced the researcher and a script was read to the class describing the instructions for the data collection, survey distribution, and collection (see Appendix E).

Once the script was read, instruments were distributed and respondents were given approximately 10 minutes to complete the instruments. If any questions arose that the entire group of respondents needed to hear, the researcher announced those to the entire group of respondents. Dates of data collection were August 24 and 25, 2011. The researcher did not return to any sections of the course to collect data from respondents who were not present on the day of data collection.

The data gathering method was to distribute the instrument to freshman-level students and allow students to turn the instrument back in if they so chose. Participating in the study was completely optional.

Response Rate

The final population based on enrollment as of the first week of classes for the 2011-2012 school year was 500 students in the incoming freshman class in the College of Agricultural Sciences and Natural Resources at Oklahoma State University (N = 500). Of those students, 445 completed to the instrument. The resulting response rate was 89.0%.

Linder, Murphy and Briers (2001) found that from 1990 to 1999 in research published in the *Journal of Agricultural Education* that "no differences were found between early and late respondents or between respondents and nonrespondents when a response rate of 85% was achieved" (p. 51). The researchers concluded that additional procedures for control of nonresponse error were not necessary when a response rate of 85% was achieved (Linder et al., 2001); therefore, follow up with non-respondents in this study was not required.

Data Analysis

Data analysis consisted of examining the mode level of trust for the reported information on people, publications, organizations, and online and broadcast media. In addition, student characteristic information was identified and analyzed using the examination of frequencies. While respondents answered on a scale from 0 to 5, means could not be taken on the responses because the incremental change in trust level from a 4 to a 5 was not equal to a change of one (J. Penn, personal communication, August, 8, 2011). Modes were, however, appropriate for this ordinal data.

The results from the instrument were collected and obtained by the researcher. The researcher input the data into *Microsoft Excel 2007* and *Statistical Package for Social Sciences* (SPSS) version 17.0 for full data analysis and then saved in a password-protected account on dropbox.com. No data that was collected was tied to student names and, therefore, could be shared among researchers via Dropbox.com.

CHAPTER IV

FINDINGS

Introduction

Chapter IV displays and explains the findings of this research study. Results from the study are discussed as they pertain to each objective set forth by the study.

Objectives

The specific research objectives guiding this study were:

1. To identify the personal and academic characteristics of students included in the study: respondents' residence prior to attending Oklahoma State, respondents' social media usage, respondents' organizational involvement, respondents' sex, respondents' political ideology, respondents' major, and respondents' home state or home country.
2. To determine students' level of trust for selected people.
3. To determine students' level of trust for selected organizations.
4. To determine students' level of trust for selected publications.
5. To determine students' level of trust for selected online and broadcast media.

Research Findings

Findings Related to Objective 1

Of the 445 students who participated in the study, 22.92% (*f* = 102) lived on a farm prior to coming to OSU, and 14.61% (*f* = 65) lived in a rural nonfarm situation (*f* = 65); 43.8% (*f* = 186) of respondents lived in a town or city larger than 10,000 people prior to attending OSU, and 18.65% (*f* = 83) of students indicated they lived in a small town under 10,000 people before coming to OSU (see Table 1).

Table 1.

Respondents' Residence Prior to Attending OSU (n = 436)

Residence	*f*	Percentage
On a Farm	102	22.92%
In a Small Town (Under 10,000)	83	18.65%
In a Large City (50,000 plus)	72	18.18%
In a Rural Area	65	14.61%
In a Large Town (10,000 to 50,000)	61	13.71%
In a Suburb of a Large City	53	11.91%

Note. Respondents were asked to select only one answer.

Of the respondents, 84.49% (*f* = 376) reported they checked their Facebook account daily (see Table 2). Fifteen students (3.37%) indicated they did not have a Facebook account.

Table 2.

Respondents' Social Media Usage

Social Media Platform	n	Daily		Weekly		Monthly		No Account	
		%	*f*	%	*f*	%	*f*	%	*f*
Personal Email	444	85.84%	381	12.81%	58	0.67%	3	0.45%	2
Facebook	445	84.49%	376	10.11%	45	2.02%	9	3.37%	15
Twitter	443	18.43%	82	11.46%	51	4.94%	22	64.72%	288

In total, 64.72% the students (*f* = 288) said they did not have a Twitter account, and 18.43% of students (*f* = 82) reported they checked their Twitter accounts daily. In total, 85.84% of respondents (*f* = 382) indicated they checked their personal email account daily while 0.45% of students (*f* = 2) said they did not have a personal email account.

A question on the instrument asked students to indicate if they were involved in six specific organizational activities: Religious Youth Group, 4-H, FFA, Scouts, High School Athletics Association, and Fellowship of Christian Athletes. Then, the respondents could write in any other organizations or activities in which they were involved. Of the total students, 30.34% of respondents (*f* = 135) wrote in organizations they were involved in other than those given.

Of the organizations provided by the researcher, 52.81% of respondents (*f* = 235) said they were involved in a religious youth group (see Table 3). Involvement in FFA and High School Athletics Associations followed closely behind religious youth groups in

terms of involvement. In total, 48.09% of the respondents (*f* = 214) self-identified as being involved in FFA, and 47.87% of the respondents (*f* = 213) said they were involved in a High School Athletics Association.

Table 3.

Respondents' Organizational Involvement (n = 445)

Organization	*f*	%
Religious Youth Group	235	52.81%
FFA	214	48.09%
High School Athletics Association	213	47.87%
Fellowship of Christian Athletes	150	33.71%
4-H	133	29.89%
Scouts	50	11.24%
National Honor Society	45	10.11%
Student Council or Government	30	6.74%
High School Performing Arts	12	2.70%
Key Club	11	2.47%
FCCLA	11	2.47%

Note. Only top answers were noted in Table 3. FFA, 4-H, Religious Youth Group, Fellowship of Christian Athletes, High School Athletics Association, and Scouts were specifically asked about on the instrument. All other responses with at least 10 students indicating involvement were reported in Table 3. All other organizations students' identified being involved with can be found in the appendices (see Appendix F).

Of the write-in organizations that were not provided by the researchers, 10.11% of respondents (*f* = 45) indicated they were involved in the National Honor Society. There were only four other organizations or high school extra-curricular activities that yielded

more than 10 students citing involvement. In total, 6.74% of respondents (*f* = 30) were involved in Student Council or Student Government; 2.70% of respondents (*f* = 12) were involved in high school or community performing arts, 2.47% of students (*f* = 11) were involved in the Key Club, and 2.47% of respondents (*f* = 11) indicated they were involved in the Family, Career and Community Leaders of America (FCCLA).

In terms of youth agricultural organizations, 29.89% of respondents (*f* = 133) were involved in 4-H (see Table 4). In total, 48.09% of respondents (*f* = 217) were involved in FFA, and 24.49% of the students (*f* = 109) were involved in both 4-H and FFA.

Table 4.

Respondents' 4-H and FFA Involvement (n = 445)

Organization(s)	*f*	Percentage
FFA	214	48.09%
4-H	133	28.89%
Both 4-H and FFA	109	24.49%

Of the total respondents, 64.94% (*f* = 289) were female and 35.06% (*f* = 156) were male (see Table 5).

Table 5.

Respondents' Sex (n = 445)

Sex	*f*	Percentage
Female	289	64.94%
Male	156	35.06%

Note. Respondents were asked to select only one answer.

In terms of political ideology, respondents were asked to describe or identify themselves as conservative, moderate or liberal. Nearly half of the respondents identified as conservative (*f* = 217; 48.76%) (see Table 6). In total, 7.64% of respondents (*f* = 34) identified as liberal, 40% of students (*f* = 178) identified as moderate, and sixteen students (3.59%) declined to state their political views.

Table 6.

Respondents' Self-reported Political Leaning (n = 429)

Political Ideal	*f*	Percentage
Conservative	217	48.76%
Moderate	178	40.00%
Liberal	34	7.64%

When students were asked to identify the major or program of study in which they were enrolled, the researchers saw many different majors represented. One hundred thirty-five respondents (29.89%) identified as being a pre-veterinary major (see Table 7).

Table 7.

Respondents' Major Area of Study (n = 445)

Major	*f*	%
Agribusiness	54	12.13%
Agricultural Communications	26	5.84%
Agricultural Economics	10	2.25%
Agricultural Education	17	3.82%
Agricultural Leadership	2	0.45%
Animal Science	65	14.61%
Biochemistry & Molecular Biology	69	15.51%
Biosystems & Agricultural Engineering	1	0.22%
Entomology	4	0.90%
Environmental Science	11	2.47%
Food Science	5	1.12%
Horticulture	4	0.90%
Landscape Architecture	6	1.34%
Natural Resource Ecology & Management	21	4.72%
Plant & Soil Science	9	2.02%
Pre-Vet	133	29.89%
Undeclared	6	1.35%
Fire Safety (not a CASNR major)	2	0.44%

Note. Respondents were asked to select one major.

Of 133 students that declared their major as pre-vet, 111 of those students were female, thus 83.46% of pre-vet students in this study identified as female (see Table 8).

Table 8.

Results for Percentage of Most Popular Majors by Sex (n = 321)

Major	Male		Female	
	f	%	*f*	%
Pre-Vet	22	16.54%	111	83.46%
Biochemistry & Molecular Biology	21	30.43%	48	69.57%
Animal Science	19	29.23%	46	70.77%
Agribusiness	32	59.26%	22	40.74%

Among biochemistry and molecular biology, animal science, and agribusiness students, only in the agribusiness department do freshman-level males outnumber freshman level females. In total, 59.26% of incoming agribusiness students are male. Among pre-vet, biochemistry and animal science, nearly 70% of all incoming freshman in those majors are female.

Behind the top four most-selected majors, only agricultural communications has over 5% of the total incoming class enrollment with 5.84% (f = 26). In total, 2.25% of students (f = 10) responded as being agricultural economics majors, and 3.82% of respondents (f = 17) indicated they were agricultural education majors. In total, 4.72% of respondents (f = 21) reported as natural resource ecology and management majors and 2.02% of respondents (f = 9) said they were soil science majors.

The largest number of students in the incoming CASNR freshman class was from Oklahoma (*f* = 284; 63.82%) (see Table 9).

Table 9.

Results for Home State or Home Country if not from USA (n = 445)

Home State or Country	*f*	%
Oklahoma	284	63.82%
Texas	80	17.98%
Kansas	16	3.60%
California	14	3.15%
Arkansas	7	1.57%
Missouri	7	1.57%
Illinois	5	1.12%
Indiana	5	1.12%
Other State	24	5.39%
Other Country	3	0.67%

Note. Students had the option to answer any state or country. The Other State and Other Country categories were determined when the researcher combined all other options not listed in the top responses. For complete list of other states and other countries, see Appendix G.

Of the student population, 17.98% of the incoming-freshman agriculture students were from Texas (*f* = 80). Together, Oklahoma and Texas make up 81.80% (*f* = 364) of the entire CASNR freshman class.

Beyond Oklahoma and Texas, the third-highest number of students came from Kansas (*f* = 16; 3.60%), then California (*f* = 14; 3.15%). Arkansas and Missouri each had seven students represented in the class for a total of 1.57% each.

Illinois and Indiana each had 1.12% (*f* = 5) of the students in the study identify them as their home state and were the only other states in addition to the ones mentioned before them to have at least 1% of the total population of the incoming College of Agricultural Sciences and Natural Resources freshman at Oklahoma State University identify them as their home state.

Besides the top-reported states, 5.39% (*f* = 24) of the students came from states beyond the top eight grossing states and only 0.67% (*f* = 3) of the students in the incoming OSU CASNR freshman class came from outside of the United States.

Findings Related to Objective 2

In terms of news and information about agriculture, 242 respondents (54.38%) indicated they occasionally trusted or trusted about half the time President Obama (see Table 10). The President's appointed cabinet secretary devoted solely to the agricultural industry, USDA Secretary Tom Vilsack, was never heard of by 216 respondents (48.54%). Among students who had heard of Vilsack, the most common level of trust reported was frequently trusted (*f* = 106; 23.82%).

Looking at the legislative arm of the United States federal government, respondents indicated they trust United States Senators about half the time (*f* = 206; 46.29%) on agricultural news and information, and 44.04% (*f* = 196) of students indicated they trusted U.S. Representatives about half the time.

Table 10.

Results for Level of Trust for Selected People

People	Total Respondents	Almost Never Trust		Occasionally Trust		Trust about Half the Time		Frequently Trust		Almost Always Trust		Never Heard of Source	
	n	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
Your Parents	444	3	0.67%	5	1.12%	12	2.70%	93	20.90%	**331**	**74.38%**	0	0.00%
Your Professors	441	1	0.22%	2	0.45%	30	6.74%	197	44.27%	**211**	**47.42%**	0	0.00%
Your Peers	441	8	1.80%	49	11.01%	144	32.36%	**190**	**42.70%**	50	11.24%	0	0.00%
U.S. Senators	441	27	6.07%	117	26.29%	**206**	**46.29%**	84	18.88%	6	1.35%	1	0.22%
U.S. Representatives	435	26	5.84%	113	25.39%	**196**	**44.04%**	89	20.00%	8	1.80%	3	0.67%
President Obama	444	116	26.07%	**121**	**27.19%**	**121**	**27.19%**	72	16.18%	13	2.92%	1	0.22%
Oprah Winfrey	435	**130**	**29.21%**	85	19.10%	79	17.75%	91	20.45%	44	9.89%	4	0.90%
Rush Limbaugh	428	59	13.26%	87	19.55%	60	13.84%	41	9.21%	5	1.12%	**176**	**39.55%**
USDA Sec. Vilsack	432	4	0.90%	23	5.17%	63	14.16%	106	23.82%	20	4.49%	**216**	**48.54%**
Michael Pollan	433	19	4.27%	26	5.84%	21	4.72%	11	2.47%	3	0.67%	**353**	**79.33%**

Note. Mode in boldface. Respondents were asked to select only one level of trust per selected source.

In terms of talk show hosts on television and radio, four respondents (0.90%) had never heard of Oprah Winfrey; of those that had heard of Winfrey, her most common level of trust was almost always trust (*f* = 130; 29.21%). 39.55% of respondents (*f* = 176) indicated they had never heard of radio-host Rush Limbaugh. Of respondents who had heard of Limbaugh, his most common trust level was that of occasionally trust (*f* = 87; 19.55%). 79.33% of respondents (*f* = 353) had never heard of author Michael Pollan. Of respondents who had heard of Pollan, his most common level of trust was that of "occasionally trust" (*f* = 26; 5.84%).

Of the total group asked about their trust level for news and information on agriculture, 47.42% of respondents (*f* = 211) said they trusted their professors at Oklahoma State almost all the time. 74.83% of respondents (*f* = 331) trusted their parents for news and information on agriculture almost all the time. (*f* = 331). The respondents said they frequently trusted their peers for information and news on agriculture (*f* = 190; 42.70%).

When respondents who had never heard of the selected organizations were removed (see Table 11), the most highly trusted source for news and information on agriculture was respondents' parents and professors at OSU. Three hundred and thirty-one (74.55%). said they trusted their parents for news and information on agriculture The least trusted sources for news and information on agriculture for sources that respondents had heard of included Oprah Winfrey, Michael Pollan, President Obama and Rush Limbaugh. One hundred and thirty respondents (30.30%) that had heard of Oprah Winfrey indicated they almost never trusted the talk show host for news and information on agriculture. Further, excluding respondents that had never heard of selected sources, 121 (27.31%) said they occasionally trusted President Obama for news and information on agriculture.

Table 11

Results for Level of Trust for Selected People Including Only Respondents Who Had Heard of the Selected Sources

People	Respondents Who Had Heard of Source	Almost Never Trust		Occasionally Trust		Trust about Half the Time		Frequently Trust		Almost Always Trust	
	n	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
Your Parents	444	3	0.68%	5	1.13%	12	2.70%	93	20.95%	**331**	**74.55%**
Your Professors	441	1	0.23%	2	0.45%	30	6.80%	197	44.67%	**211**	**47.85%**
Your Peers	441	8	1.81%	49	11.11%	144	32.65%	**190**	**43.08%**	50	11.34%
USDA Sec. Vilsack	216	4	1.85%	23	10.65%	63	29.17%	**106**	**49.07%**	20	9.26%
U.S. Senators	440	27	6.14%	117	26.59%	**206**	**46.82%**	84	19.09%	6	1.36%
U.S. Representatives	432	26	6.02%	113	26.16%	**196**	**45.37%**	89	20.60%	8	1.85%
President Obama	443	116	26.19%	**121**	**27.31%**	**121**	**27.31%**	72	16.25%	13	2.93%
Rush Limbaugh	252	59	23.41%	**87**	**34.52%**	60	23.81%	41	16.27%	5	1.98%
Michael Pollan	80	19	23.75%	**26**	**32.50%**	21	26.25%	11	13.75%	3	3.75%

Note. Mode in boldface. Respondents were asked to select only one level of trust per selected source.

Table 12.

Results for Level of Trust for Selected Organizations

Organizations	Total Respondents	Almost Never Trust		Occasionally Trust		Trust about Half the Time		Frequently Trust		Almost Always Trust		Never Heard of Source	
	n	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
National FFA	442	1	0.22%	15	3.37%	51	11.46%	161	36.18%	**188**	**42.25%**	26	5.84%
United States Dept. of Agriculture	443	3	0.67%	24	5.39%	65	14.61%	**195**	**43.82%**	140	31.46%	16	3.60%
Oklahoma Dept. of Ag, Food & Forestry	439	2	0.45%	20	4.49%	80	17.98%	**176**	**39.55%**	88	19.78%	73	16.40%
National 4-H	443	6	1.35%	15	3.37%	59	13.26%	**170**	**38.20%**	122	27.42%	71	15.96%
American Farmers & Ranchers	442	2	0.45%	13	2.92%	50	11.24%	**152**	**34.16%**	105	23.60%	120	26.97%
Humane Society of the United States	441	47	10.56%	56	12.58%	98	22.02%	**115**	**25.84%**	69	15.51%	56	12.58%
Republican National Committee	440	44	9.89%	71	15.96%	111	24.94%	**112**	**25.17%**	48	10.79%	54	12.13%
Democratic National Committee	441	94	12.12%	115	25.84%	**125**	**28.09%**	41	9.21%	10	2.25%	56	12.58%
People for the Ethical Treatment of Animals	443	**196**	**44.04%**	66	14.83%	71	15.96%	62	13.93%	24	5.39%	24	5.39%
American Farm Bureau Federation	441	4	0.90%	18	4.04%	76	17.08%	145	32.58%	55	12.36%	**143**	**36.13%**

Note. Mode in boldface. Respondents were asked to select only one level of trust per selected source.

Findings Related to Objective 3

Of the 10 organizations given by the researcher, only the Democratic National Committee and the People for the Ethical Treatment of Animals (PETA) had their highest levels of trust below frequently trust.

Of the total respondents, 42.25% of respondents (*f* = 188) trusted National FFA almost all the time, 36.18% of respondents (*f* = 161) said they frequently trusted National FFA, and 65.62% of respondents (*f* = 292) said they frequently trusted or almost always trusted National 4-H for information and news on agriculture (see Table 12).

The United States Department of Agriculture (USDA) as a stand-alone entity was frequently trusted on agriculture 43.82% of the time (*f* = 195), and 39.55% of respondents (*f* = 176) said they frequently trusted the state governmental agricultural department, the Oklahoma Department of Agriculture, Food and Forestry, for news and information on agriculture.

The American Farm Bureau Federation (AFBF) was frequently trusted on agriculture 32.58% of the time (*f* = 145). 32.13% of respondents (*f* = 143) said they had never heard of AFBF. American Farmers and Ranchers (AFR) were frequently trusted 34.16% of the time (*f* = 152), and 26.97% of student respondents (*f* = 120) said they had never heard of the organization.

Researchers asked respondents to rate their level of trust for two animal rights groups. The People for the Ethical Treatment of Animals (PETA) were almost never trusted by the 196 respondents (44.04%), and only 5.39% of students (*f* = 24) said they had never heard of the organization. Additionally, 25.84% of respondents (*f* = 115) said they frequently trusted the Humane Society of the United States (HSUS) for information

on agriculture, and 45.16% of respondents (*f* = 201) indicated they trusted HSUS almost never or occasionally.

In the head-to-head showdown between the Republican National Committee (RNC) and the Democratic National Committee (DNC), 25.17% of students (*f* = 112) said they frequently trusted the RNC for news and information on agriculture. 9.21% of students (*f* = 41) responded that they frequently trusted the DNC. 28.09% of respondents (*f* = 125) said they trusted the DNC about half the time for news and information on agriculture.

When respondents who had never heard of the selected sources were removed (see Table 13), the most trusted source was National FFA. One hundred eighty-eight student respondents (45.19%) said they almost always trusted National FFA for news and information on agriculture after students who had never heard of National FFA were removed.

The source that gained the least amount of trust after respondents who had never heard of selected sources were removed was still the People for the Ethical Treatment of Animals (PETA). One hundred ninety-six respondents indicated they almost never trusted PETA for news and information on agriculture.

When only respondents who had heard of the selected sources were included in the data, PETA was the only organization to record a trust level of almost never trust or occasionally trust for news and information on agriculture. Every other source included in the study for selected organizations gained a level of trust from respondents of trust about half the time, frequently trust or almost always trust when only respondents who had heard of the selected sources were included.

Table 13.

Results for Level of Trust for Selected Organizations Including Only Respondents Who Had Heard of the Selected Sources

Organizations	Respondents Who Had Heard of Source	Almost Never Trust		Occasionally Trust		Trust about Half the Time		Frequently Trust		Almost Always Trust	
	n	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
National FFA	416	1	0.24%	15	3.61%	51	12.26%	161	38.70%	**188**	**45.19%**
American Farm Bureau Federation	298	4	1.34%	18	6.04%	76	25.50%	**145**	**48.66%**	55	18.46%
Oklahoma Dept. of Ag, Food & Forestry	366	2	0.55%	20	5.46%	80	21.86%	**176**	**48.09%**	88	24.04%
American Farmers & Ranchers	322	2	0.62%	13	4.04%	50	15.53%	**152**	**47.20%**	105	32.61%
National 4-H	372	6	1.61%	15	4.03%	59	15.86%	**170**	**45.70%**	122	32.80%
United States Dept. of Agriculture	427	3	0.70%	24	5.62%	65	15.22%	**195**	**45.67%**	140	32.79%
Humane Society of the United States	385	47	12.21%	56	14.55%	98	25.45%	**115**	**29.87%**	69	17.92%
Republican National Committee	386	44	11.40%	71	18.39%	111	28.76%	**112**	**29.02%**	48	12.44%
Democratic National Committee	385	94	24.42%	115	29.87%	**125**	**32.47%**	41	10.65%	10	2.60%
People for the Ethical Treatment of Animals	419	**196**	**46.78%**	66	15.75%	71	16.95%	62	14.80%	24	5.73%

Note. Mode in boldface. Respondents were asked to select only one level of trust per selected source.

Findings Related to Objective 4

In total, 39.41% of respondents (*f* = 175) indicated they frequently trusted *The Oklahoman* for news and information on agriculture (see Table 14). *The Daily O'Collegian* was also frequently trusted for news and information on agriculture (*f* = 174; 39.10%). The *Wall Street Journal* was frequently trusted by respondents 35.28% of the time (*f* = 157), and 36.58% of respondents (*f* = 164) indicated they trusted the other national newspaper in the study, *The New York Times*, about half the time.

In terms of other magazines included in the study, 39.78% of the students (*f* = 177) indicated they frequently trusted *National Geographic* magazine, 39.33% of respondents (*f* = 175) said they trusted the magazine for information and news on agriculture almost all the time, and 79.11% of respondents (*f* = 352) said they trusted *National Geographic* at the two highest levels of trust, either frequently or almost all the time.

In terms of the other magazines included in the study, 37.98% of respondents (*f* = 169) indicated they trusted *Newsweek* about half the time for news and information on agriculture. Also, 37.08% of respondents (*f* = 165) said they occasionally trusted *People*.

In response to farm publications, 34.83% of students (*f* = 155) said they had never heard of *Farm Journal.* However, 34.61% of respondents (*f* = 154) said they frequently trusted the farm publication for news and information on agriculture, and 67.87% of respondents (*f* = 302) said they had never heard of *Acres U.S.A.*, the most-largely distributed publication for Eco-Agriculture. Of the total respondents, 62.25% of the respondents (*f* = 227) reported they had "never heard" of the *Journal of Applied Communications* (JAC).

Table 14.

Results for Level of Trust for Selected Publications

Publications	Total Respondents	Almost Never Trust		Occasionally Trust		Trust about Half the Time		Frequently Trust		Almost Always Trust		Never Heard of Source	
	n	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
National Geographic	442	10	2.25%	13	2.92%	63	14.16%	**177**	**39.78%**	175	39.33%	4	0.90%
The Oklahoman	440	10	2.25%	28	6.31%	97	21.85%	**175**	**39.41%**	51	11.49%	79	17.79%
The Daily O'Collegian	445	13	2.92%	32	7.19%	105	23.60%	**174**	**39.10%**	60	13.48%	61	13.71%
Wall Street Journal	442	26	5.84%	47	10.56%	132	29.66%	**157**	**35.28%**	68	15.28%	12	2.70%
Newsweek	442	34	7.64%	98	22.02%	**169**	**37.98%**	75	16.85%	32	7.19%	34	7.64%
The New York Times	443	25	5.62%	59	13.26%	**164**	**36.85%**	144	32.36%	50	11.24%	1	0.22%
People	442	126	28.31%	**165**	**37.08%**	101	22.70%	38	8.54%	7	1.57%	5	1.12%
Acres U.S.A.	445	8	1.80%	6	1.35%	53	11.91%	54	12.13%	22	4.94%	**302**	**67.87%**
Journal of Applied Communications	438	8	1.80%	13	2.92%	65	14.61%	55	12.36%	20	4.49%	**277**	**62.25%**
Farm Journal	444	4	0.90%	15	3.37%	63	14.16%	154	34.61%	53	11.91%	**155**	**34.83%**

Note. Mode in boldface. Respondents were asked to select only one level of trust per selected source.

Of the 168 students who had heard of JAC, 38.70% of them (*f* = 65) trusted the journal about half the time for news and information on agriculture.

When respondents who had never heard of the selected publications were removed (see Table 15), respondents most frequently trusted *Farm Journal* (*f* = 154; 53.29%). Of the respondents who had heard of the sources, 177 (40.41%) next most trusted *National Geographic*. Both *The Daily O'Collegian* (*f* = 174; 45.31%) and *The Oklahoman* (*f* = 175; 48.48%) were the next trusted sources for published media.

Findings Related to Objective 5

When students indicated their level of trust in broadcast and online media, 40.22% of respondents (*f* = 179) said they almost always trust Twitter for news on agriculture (see Table 16) and 32.58% of respondents (*f* = 145) said they occasionally trust Facebook for news and information on agriculture. When it came to agricultural news and information 40.22% of respondents (*f* = 179) said they almost never trusted Wikipedia.

Of the total group of incoming freshman-level students, 31.91% of respondents (*f* = 142) indicated they trusted the National Public Radio (NPR) about half the time and 33.71% of respondents (*f* = 150) said they trusted the Cable News Network (CNN) about half the time, and 30.79% of respondents (*f* = 137) reported frequently trusting CNN.

Fox News, American Broadcasting News (ABC) and the respondent's local news affiliate were all most commonly frequently trusted for news and information on agriculture. 34.61% of the students (*f* = 154) frequently trusted ABC News. Fox News was frequently trusted by 34.83% of respondents (*f* = 155) and 48.31% of respondents (*f* = 215) frequently trusted their local news affiliate. Fox News and the respondents' local news affiliates were the only broadcast and online news media sources that all 445 respondents had heard of.

Table 15.

Results for Level of Trust for Selected Publications Including Only Respondents Who Had Heard of the Selected Sources

Publications	Respondents Who Had Heard of Source	Almost Never Trust		Occasionally Trust		Trust about Half the Time		Frequently Trust		Almost Always Trust	
	n	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
Farm Journal	289	4	1.38%	15	5.19%	63	21.80%	**154**	**53.29%**	53	18.34%
National Geographic	438	10	2.28%	13	2.97%	63	14.38%	**177**	**40.41%**	175	39.95%
The Oklahoman	361	10	2.77%	28	7.76%	97	26.87%	**175**	**48.48%**	51	14.13%
The Daily O'Collegian	384	13	3.39%	32	8.33%	105	27.34%	**174**	**45.31%**	60	15.63%
Acres U.S.A.	143	8	5.59%	6	4.20%	53	37.06%	**54**	**37.76%**	22	15.38%
Wall Street Journal	430	26	6.05%	47	10.93%	132	30.70%	**157**	**36.51%**	68	15.81%
Newsweek	408	34	8.33%	98	24.02%	**169**	**41.42%**	75	18.38%	32	7.84%
Journal of Applied Communications	161	8	4.97%	13	8.07%	**65**	**40.37%**	55	34.16%	20	12.42%
The New York Times	442	25	5.66%	59	13.35%	**164**	**37.10%**	144	32.58%	50	11.31%
People	437	126	28.83%	**165**	**37.76%**	101	23.11%	38	8.70%	7	1.60%

Note. Mode in boldface. Respondents were asked to select only one level of trust per selected source.

Table 16.

Results for Level of Trust for Selected Online and Broadcast Media

Online & Broadcast Media	Total Respondents	Almost Never Trust		Occasionally Trust		Trust about Half the Time		Frequently Trust		Almost Always Trust		Never Heard of Source	
	n	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
Your Local News	444	7	1.57%	35	7.87%	114	25.62%	**215**	**48.31%**	73	16.40%	0	0.00%
Fox News	442	33	7.42%	72	16.18%	127	28.54%	**155**	**34.83%**	55	12.36%	0	0.00%
ABC	443	10	2.25%	49	11.01%	144	32.36%	**154**	**34.61%**	72	16.18%	14	3.15%
CNN	443	31	6.97%	63	14.16%	**150**	**33.71%**	137	30.79%	54	12.13%	8	1.80%
NPR	441	27	6.07%	73	16.40%	**142**	**31.91%**	92	20.67%	23	5.17%	84	18.88%
Facebook	443	124	27.87%	**145**	**32.58%**	121	27.19%	38	8.54%	12	2.70%	4	0.90%
Twitter	444	**179**	**40.22%**	125	28.09%	91	20.45%	30	6.74%	4	0.90%	15	3.37%
Wikipedia	445	**179**	**40.22%**	140	31.46%	77	17.30%	30	6.74%	17	3.82%	2	0.45%
RFD-TV	443	7	1.57%	28	6.29%	47	10.56%	81	18.20%	41	9.66%	**237**	**53.26%**
C-SPAN	439	25	5.62%	65	14.61%	119	26.74%	71	15.96%	33	7.42%	**126**	**28.31%**

Note. Mode in boldface. Respondents were asked to select only one level of trust per selected source.

The Cable-Satellite Public Affairs Network (C-SPAN) and the Rural Free Delivery TV (RFD-TV) sources were both most commonly never heard of by respondents. In fact, 53.26% of students (*f* = 237) said they had never heard of RFD-TV. Also, 28.31% of respondents (*f* = 126) indicated they had never heard of C-SPAN. However, 18.20% of respondents (*f* = 81) said they frequently trusted RFD-TV for news and information on agriculture, and 9.21% (*f* = 41) said they almost always trusted RFD-TV.

When respondents who had never heard of the selected online and broadcast media sources were removed (see Table 17), the most trusted source was the respondents' local news. Of the respondents, 215 (48.42%) said they frequently trusted their local news affiliate. Of respondents who had heard of the selected sources for online and broadcast media, the least trusted sources were Twitter (*f* = 179; 41.72%) and Wikipedia (*f* =179; 40.41%), both sources were almost never trusted for news and information on agriculture.

Summary

When researchers looked solely at given sources for the two extreme categories of trust, either almost always trust or almost always trust the top five sources for almost always trust and the top five sources for almost always trust least are shown in Table 18 and Table 19.

Respondents most highly identified with almost always trusting their parents for news and information on agriculture, and identified most with almost never trusting PETA, Twitter and Wikipedia for news and information as it related to agriculture (see Table 18 and Table 19).

Table 17.

Results for Level of Trust for Selected Online and Broadcast Media Including Only Respondents Who Had Heard of Selected Sources

Online & Broadcast Media	Respondents Who Had Heard of Source	Almost Never Trust		Occasionally Trust		Trust about Half the Time		Frequently Trust		Almost Always Trust	
	n	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
Your Local News	444	7	1.58%	35	7.88%	114	25.68%	**215**	**48.42%**	73	16.44%
ABC	429	10	2.33%	49	11.42%	144	33.57%	**154**	**35.90%**	72	16.78%
RFD-TV	204	7	3.43%	28	13.73%	47	23.04%	**81**	**39.71%**	41	20.10%
Fox News	442	33	7.47%	72	16.29%	127	28.73%	**155**	**35.07%**	55	12.44%
CNN	435	31	7.13%	63	14.48%	150	34.48%	**137**	**31.49%**	54	12.41%
NPR	357	27	7.56%	73	20.45%	**142**	**39.78%**	92	25.77%	23	6.44%
C-SPAN	313	25	7.99%	65	20.77%	**119**	**38.02%**	71	22.68%	33	10.54%
Facebook	440	124	28.18%	**145**	**32.95%**	121	27.50%	38	8.64%	12	2.73%
Twitter	429	**179**	**41.72%**	125	29.14%	91	21.21%	30	6.99%	4	0.93%
Wikipedia	443	**179**	**40.41%**	140	31.60%	77	17.38%	30	6.77%	17	3.84%

Note. Mode in boldface. Respondents were asked to select only one level of trust per selected source.

Table 18.

Top Sources for Almost Always Trust

Source	*f*	Percentage
Your Parents	331	74.38%
Your OSU Professors	211	47.42%
National FFA	188	42.25%
National Geographic	175	39.33%
United States Dept. of Agriculture	140	31.46%

Table 19.

Top Sources for Almost Never Trust

Source	*f*	Percentage
PETA	196	44.04%
Twitter	179	40.22%
Wikipedia	179	40.22%
Oprah	130	29.31%
People	126	28.31%

CHAPTER V

CONCLUSIONS, RECOMMENDATIONS, & IMPLICATIONS

Introduction

This chapter provides conclusions, recommendations, and implications based on the findings of this study as they relate to the five objectives determined by the researcher. The last section is reserved for further discussion of the research.

Conclusions and Implications for Objective 1

The first objective sought to identify the personal and academic characteristics of students included in the study. Specifically, data including students' major, home state, organizational involvement, residence prior to coming to OSU, sex, political affiliation, and social media usage were examined.

A typical freshman in the College of Agricultural Sciences and Natural Resources at Oklahoma State University is a female, pre-veterinary sciences major from Oklahoma. She grew up on a farm, was involved in a religious youth group organization and was a member of the National FFA Organization and/or 4-H. She has a Facebook account that she checks daily and is politically conservative.

The conclusion regarding major leads to some interesting points. OSU does not offer a pre-veterinary science major. While a pre-veterinary sciences option or concentration is offered in the majors of animal science, biochemistry and molecular

biology and entomology, no major of that name is available (OSU 2011-2012 Undergraduate Programs and Requirements, 2011).

Findings of this study revealed that the greatest number of students had majors associated with the sciences. Those majors include animal science, biochemistry and molecular biology, entomology, environmental sciences, food science, natural resource ecology and management, plant and soil sciences, and the pre-veterinary sciences.

Could it be collegiate recruiters need to focus more recruiting efforts on gaining students who want to be involved in social science majors and more effectively market these programs to prospective students to help expand enrollment in these programs? Or could it be agriculture-specific colleges at land-grant universities will continue to have high concentrations of pre-veterinary science students and should work to incorporate agricultural news and information into pre-veterinary science courses, if that is where a large majority of students will end up?

Conclusions and Implications for Objective 2

The people most trusted for information about agriculture by freshman CASNR students at OSU are their parents, peers, and professors. Of the people selected for them to consider, they trust least Oprah Winfrey, Rush Limbaugh, and Michael Pollan.

When considering elected officials, students trust the country's top elected official, President Obama, less than they trust their U.S. senators and U.S. representatives. They trust none of the national figures, however, at the level they trust the parents, peers, and professors. Thus, it can be concluded that freshman CASNR students at OSU find persons with whom they have more personal interaction to be more trustworthy sources of information about agriculture.

Based on the finding that nearly half of the students indicated they had never heard of USDA Secretary Tom Vilsack, it can be concluded that students studying agriculture and natural resources at OSU have limited awareness of officials who carry out policy impacting the area they are studying.

Since these students were members of 4-H and/or FFA, could it be that youth agricultural organizations need to teach more thoroughly the makeup of the U.S. Department of Agriculture, preparing students to identify who the USDA Secretary is and be able to make an informed decision as to if he should be trusted for news and information on agriculture? Or could it be the USDA is diminishing as an advocacy arm for United States production agriculture and acting more as a regulator in the eyes of young people involved with the agricultural industry?

Conclusions and Implications for Objective 3

Freshman CASNR students trust the National FFA Organization, the National 4-H, the United States Department of Agriculture, and the Oklahoma Department of Agriculture, Food, and Forestry more than the other organizations selected in the study. Students least trust the People for the Ethical Treatment of Animals (PETA).

Some organizations in the study, such as National FFA and National 4-H, aim to develop a more agriculturally literate population. However, it appears that perhaps many different levels of agricultural literacy exist, and organizations must work to further agricultural literacy in the United States and the world by first earning the recognition of youth studying agriculture. Notably, students who recognize the nation's largest member organization representing farm interests, the American Farm Bureau Federation (AFBF), frequently trust them for information about agriculture; however, a great number of

respondents say they have never heard of the organization. Could it be these students do not identify their state Farm Bureau association as a member of the American Farm Bureau Federation? Or could it be that Farm Bureau organizations are not achieving an understanding among young people that the organization has many different level and tiers? Further, CASNR freshmen trust American Farmers and Ranchers, an Oklahoma-specific farm advocacy group, at a higher level than AFBF, even though the political ideology of a majority of the respondents would infer the opposite. Could the personal state connections again influence who the students trust?

The Humane Society of the United States (HSUS) and the PETA, the two animal rights advocacy organizations in the study, are recognized by CASNR freshmen more than AFBF and AFR. Could it be these agricultural organizations as well as other agricultural advocacy groups need to do more to reach young people in agriculture to become as identified as the animal rights contingency? Or is it that students who grew up on a farm or in a rural community and are enrolled in the College of Agricultural Sciences and Natural Resources at OSU are taught to identify animal rights groups more quickly than agricultural advocacy groups?

Conclusions and Implications for Objective 4

CASNR freshmen students trust the agricultural news found in national newspapers like the *The New York Times* and the *Wall Street Journal* as well as the *National Geographic* magazine. In contrast, they lack trust for *People* magazine.

Given students high trust of *the New York Times*, the *Wall Street Journal*, the *Daily O'Collegian*, and *The Oklahoman*, could it be national and local periodicals that are not agriculture-specific are trusted because young people trust printed news? Or could

it be students perceive periodicals do the best job of covering trustworthy news and information overall so they also present trustworthy news on agriculture?

When targeted published media are examined, students have differing levels of trust and have never heard of published media such as the *Journal of Applied Communications*, *Farm Journal*, and *Acres U.S.A.* Perhaps farm-specific publications and research journals should focus their communications efforts more on reaching a younger demographic so the information in these publications can be viewed across a growing demographic. Also, could it be that students look to digital media for news and information more than they do published media?

Conclusions and Implications for Objective 5

Students trust Fox News, ABC News, and their local television news more than the other selected sources for online and broadcast media. Even as connected as they indicate they are to Facebook and email, the students least trust Twitter and Wikipedia for agricultural information.

Since students trust Fox News, ABC News, and their local television news, could it be agricultural media specialists need to ensure these programs carry news as it relates to agriculture? Could it be that Fox News, ABC News, and local television news would be a good way to reach both agricultural and non-agricultural college freshmen with information and news on agriculture?

As many agricultural organizations work to try and reach incoming freshman-level students with news and information on agriculture, what can they do to make the information they share via social media trustworthy to the young people who access that

information? Could it be that incoming freshman-level students in CASNR at OSU enjoy online media and social media sites only for entertainment and social interaction?

If students studying agriculture and natural resources have never heard of agricultural-specific media, whether print, online or broadcast, should one expect the level of trust or knowledge of these selected sources to be lower or higher? Should that affect how agriculturalists share information?

Recommendations for Practice

Based on the findings, conclusions, and implications of this study, the researcher presents the following recommendations for practice:

1. Organizations, universities, or others trying to reach incoming college freshman with news and information on agriculture should share it via email or Facebook as these students not only trust these sources but use them on a daily basis.
2. If news and information about agriculture is to be shared, it should come from organizations or individuals with whom students or young people have had high involvement or a personal connection.
3. Professors at Oklahoma State University need to understand that their students view them as trustworthy sources for news and information on agriculture; therefore, they should always report and teach factual information rather than reflect some personal bias on certain topics related to agriculture.
4. Educators should work to expose high school and college students to accurate and diverse sources for news and information on agriculture so they can seek those sources for information when they desire it.

5. Educators, mentors, and others involved with college freshmen need to encourage or require them to read printed media, agricultural as well as tradition news. Young people need to receive publications to read so they have exposure to them. If students trust educators, mentors, and others involved with giving them publications for reading, they will be more likely to trust the publications they are given.
6. Print media publishers need to determine what they could publish that would appeal to a younger audience and then pursue that audience.
7. CASNR faculty members need to expose students to media specific to their respective disciplines.
8. Executives at agricultural-specific media companies need to work on making their programs, magazines, radio shows, and other media pieces known to a larger and wider audience, especially those under age 20 who are incoming college freshmen in colleges of agriculture.

Recommendations for Research

Based on the findings, conclusions, and implications of this study, the researcher presents the following recommendations for research:

1. As CASNR freshmen come from rural areas, future research is needed to determine where students see themselves living after experience at a college or university. In a society that sees fewer young people returning to production agriculture, this information could be helpful in preparing to reach this audience.

2. Research should be conducted to understand what personal influences affect a student's choice of a major, including background in production agriculture or organizational involvement.
3. Future research should investigate how selected sources compare in levels of trust based on different types of information. For example, do students highly trust parents, peers, and professors for most information and news? Or are these groups more highly trustworthy for agricultural news and information and not as highly trusted for other information?
4. Future research should include focus groups of students to determine the reasons why they view their peers, parents, and professors as highly trustworthy. Research should specifically ask if those three groups are deemed trustworthy for news and information on agriculture because of the degrees they have earned, research they have published, experiences they have had, years they have lived, and other specific criteria.
5. Since students identified as largely conservative or moderate, future research should determine if members of an administration's cabinet are more highly trusted when their political ideologies closely align.
6. Future research should determine what organizations freshmen students trust for specific types of information and news on agriculture. For example, is the National FFA a good source for all things agriculture? Are they a good source for information on dogs, cats and local animal shelters? Are they a good source for statistics about production agriculture from across the country?

7. Future research should determine what incoming college freshman-level students trust, read, and pass along to their peers.
8. Research should determine how often incoming college freshmen access printed media, such as *The New York Times,* from a website and if they consider that "print" or "online and broadcast media."
9. Further research should include specific data collection for trust of online and broadcast media. An entire instrument should be developed to determine what specific sources on Facebook and Twitter students trust for news and information on agriculture and to determine why.
10. Future research should specifically identify what on social media sites incoming freshman-level students deemed trustworthy and why they trust those sites.
11. Future research should investigate the level of trust other groups have for these selected sources of news and information about agriculture

Additional Discussion

The agricultural industry must begin to innovate and find new ways to reach a diverse customer base. How will the media portray agriculture in the future? How can agriculture use the media as an aide or a teammate in telling its story? These things must be determined and consumers must trust producers if the industry will continue to thrive and succeed at a high level for many years into the future.

Trust and belief in any industry is important. In an industry like agriculture where everyone is a consumer, trust in food production is essential. As technology continues to advance, producers need to know how to reach consumers with a message they trust.

Research needs to continue to look at young people involved in food purchasing and agriculture. For the future prowess of the agricultural industry, young human minds — and what they think about agriculture — must be understood. This will better help agriculturalists to continue to produce and market the safest, most abundant food supply in the world.

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APPENDICES

APPENDIX A:

Oklahoma State University Institutional Review Board

Date	Friday, August 19, 2011	**Protocol Expires:**	**8/17/2012**
IRB Application	AG1140		
Proposal Title:	Determining Oklahoma State University College of Agricultural Sciences and Natural Resources Freshman-Level Students' Trust Level in Sources for Information About Agriculture		
Reviewed and Processed as:	Exempt **Modification**		

Status Recommended by Reviewer(s) **Approved**

Principal Investigator(s) :

Kirk Kimmelshue	Shelly Sitton
1627 W. 22nd Ave.	448 Ag Hall
Stillwater, OK 74074	Stillwater, OK 74078

The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB

☒ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

Signature : Shelia H. Kennison

Shelia Kennison, Chair, OSU Institutional Review Board

Friday, August 19, 2011
Date

PARTICIPANT INFORMATION
OKLAHOMA STATE UNIVERSITY

Title: Determining Oklahoma State University College of Agricultural Sciences and Natural Resources Freshman-Level Students' Trust Level in Sources of Information about Agriculture.

Investigators: Kirk Kimmelshue and Dr. Shelly Sitton, Agricultural Communications

Purpose: The purpose of the research study is to determine trust levels of freshman-level students in the College of Agricultural Sciences and Natural Resources at Oklahoma State University concerning sources for information about agriculture. **You must be 18 years or older to participate.**

What to Expect: Participation in this study will require you to complete one questionnaire that is 47 questions long. The questionnaire should take you approximately 10 minutes or less to complete.

Risks: There are no risks associated with this project which are expected to be greater than those ordinarily encountered in daily life. To minimize these risks no identifiers are to be associated with your data and no signed record of your consent will be collected.

Benefits: You may gain an appreciation and understanding of how research is conducted and understand the types of research being done by your peers at Oklahoma State University.

Compensation: No compensation will be received by any participants taking part in the research.

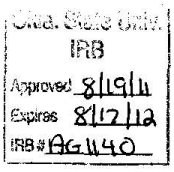
Your Rights: Your participation in this research is **voluntary**. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time, without penalty.

Confidentiality: All information about you will be kept confidential and will not be released. You will not be identified individually.

Contacts: You may contact the principal researcher of the study, Kirk Kimmelshue at kirk.kimmelshue@okstate.edu or at 530-570-1515 should you have any questions about the study.

If you choose to participate: Please complete the attached questionnaire and return it to the box provided when completed.

Please detach this information sheet from the questionnaire for your records should you wish to contact anyone about the data collected from this questionnaire.



APPENDIX B:

Instrument

What Sources of Information Do You Trust?

When you hear or read statements coming from each of the following sources, how much do you trust the statements? Circle the number on the scale to the right of the source that most nearly represents your level of trust in that source.

Circle **NH** if you have **NEVER HEARD** of the source **OR** circle the appropriate number using the following scale:
1 = almost never trust; 2 = occasionally trust; 3 = trust about half the time; 4 = frequently trust; 5 = almost always trust

A. People	Never Heard of Source	Almost Never Trust	Occasionally Trust	Trust About ½ the Time	Frequently Trust	Almost Always Trust
1. President Barack Obama	NH	1	2	3	4	5
2. U.S. Secretary of Agriculture Tom Vilsack	NH	1	2	3	4	5
3. U.S. Senators	NH	1	2	3	4	5
4. U.S. Congressional Representatives	NH	1	2	3	4	5
5. Rush Limbaugh	NH	1	2	3	4	5
6. Oprah Winfrey	NH	1	2	3	4	5
7. Michael Pollan	NH	1	2	3	4	5
8. Your Professors at Oklahoma State University	NH	1	2	3	4	5
9. Your Peers	NH	1	2	3	4	5
10. Your Parents	NH	1	2	3	4	5
B. Organizations						
1. National Future Farmers of America (FFA)	NH	1	2	3	4	5
2. U.S. Department of Agriculture (USDA)	NH	1	2	3	4	5
3. American Farmers & Ranchers (AFR)	NH	1	2	3	4	5
4. Humane Society of United States (HSUS)	NH	1	2	3	4	5
5. Oklahoma Department of Agriculture, Food & Forestry	NH	1	2	3	4	5
6. Republican National Committee	NH	1	2	3	4	5
7. Democratic National Committee	NH	1	2	3	4	5
8. People for the Ethical Treatment of Animals (PETA)	NH	1	2	3	4	5
9. American Farm Bureau Federation (AFBF)	NH	1	2	3	4	5
10. National 4-H (4-H)	NH	1	2	3	4	5
C. Published Media						
1. *The New York Times* (daily newspaper)	NH	1	2	3	4	5
2. *The Daily O'Collegian* (campus newspaper)	NH	1	2	3	4	5
3. *Newsweek* (magazine)	NH	1	2	3	4	5
4. *Farm Journal* (magazine)	NH	1	2	3	4	5
5. Journal of Applied Communications (research journal)	NH	1	2	3	4	5
6. *The Oklahoman* (daily newspaper)	NH	1	2	3	4	5
7. *People* (magazine)	NH	1	2	3	4	5
8. Wall Street Journal (daily newspaper)	NH	1	2	3	4	5
9. *National Geographic* (magazine)	NH	1	2	3	4	5
10. Acres U.S.A. - A Voice for Eco-Agriculture	NH	1	2	3	4	5

D. Broadcast and Online Media	Never Heard of Source	Almost Never Trust	Occasionally Trust	Trust About ½ the Time	Frequently Trust	Almost Always Trust
1. Facebook	NH	1	2	3	4	5
2. Twitter	NH	1	2	3	4	5
3. National Public Radio (NPR)	NH	1	2	3	4	5
4. Cable News Network (CNN)	NH	1	2	3	4	5
5. Fox News	NH	1	2	3	4	5
6. Cable-Satellite Public Affairs Network (C-SPAN)	NH	1	2	3	4	5
7. Rural Free Delivery TV (RFD-TV)	NH	1	2	3	4	5
8. Your Local News	NH	1	2	3	4	5
9. American Broadcasting Co. (ABC) News	NH	1	2	3	4	5
10. Wikipedia	NH	1	2	3	4	5

E. Student Characteristics

1. Prior to arriving at Oklahoma State University, where did you live? Please circle the most appropriate response.

   On a farm In a Rural Area In a Small Town (under 10,000)
   In a Large Town (10,000 to 50,000) In a Suburb of a Large City In a Large City (greater than 50,000)

2. How often do you check the following?

   a. Facebook account
      Daily Weekly Monthly I do not have Facebook account.
   b. Twitter account
      Daily Weekly Monthly I do not have a Twitter account.
   c. Personal email account
      Daily Weekly Monthly I do not have a personal email account.

3. Which of the following organizations were you involved in? (Circle all that apply.)

   FFA Fellowship of Christian Athletes
   4-H High School Athletics Association
   Religious Youth Group Scouts

   Other (please specify)

   _____

4. What is your sex? Male Female

5. Politically speaking, which of the following would you describe yourself as? Conservative Moderate Liberal

6. What is your major? Please Print.

   _____

7. If you are a United States citizen, what is your home state? If not, what country are you from? Please Print.

   _____

APPENDIX C:

Panel of Experts

Shelly Sitton, Ph.D.
Professor
Department of Agricultural Education, Communications, & Leadership
Oklahoma State University

Robert Terry, Jr., Ph.D.
Professor and Head
Department of Agricultural Education, Communications, & Leadership
Oklahoma State University

Jerry Fitch, Ph.D.
Professor
Department of Animal Science
Oklahoma State University

Dwayne Cartmell, Ph.D.
Professor
Department of Agricultural Education, Communications, & Leadership
Oklahoma State University

James Key, Ph.D.
Professor
Department of Agricultural Education, Communications, & Leadership
Oklahoma State University

APPENDIX D:

Pilot Study Instrument

What Sources of Information Do You Trust?

When you hear or read statements coming from each of the sources listed below, how much do you trust the statements? Circle the number on the scale to the right of the source that most nearly represents your level of trust in that source.

Circle the zero (0) if you have NEVER HEARD of the source given.

1 = Almost never trust; 2 = Occasionally trust; 3 = Trust about half the time; 4 = Frequently trust; 5 = Almost always trust

A. People						
1. The President of the United States	0	1	2	3	4	5
2. U.S. Secretary of Agriculture	0	1	2	3	4	5
3. Your U.S. Senator	0	1	2	3	4	5
4. Your U.S. Representative	0	1	2	3	4	5
5. Rush Limbaugh	0	1	2	3	4	5
6. Oprah Winfrey	0	1	2	3	4	5
7. Michael Pollan	0	1	2	3	4	5
8. Your Professors	0	1	2	3	4	5
9. Your Peers	0	1	2	3	4	5
10. Your Parents	0	1	2	3	4	5

B. Organizations						
1. Your State Legislature	0	1	2	3	4	5
2. U.S. Department of Agriculture (USDA)	0	1	2	3	4	5
3. I Love Farmers ...They Feed My Soul	0	1	2	3	4	5
4. Humane Society of United States (HSUS)	0	1	2	3	4	5
5. Oklahoma Department of Agriculture, Food & Forestry	0	1	2	3	4	5
6. Republican National Committee	0	1	2	3	4	5
7. Democratic National Committee	0	1	2	3	4	5
8. People for the Ethical Treatment of Animals (PETA)	0	1	2	3	4	5
9. American Farm Bureau Federation (AFBF)	0	1	2	3	4	5
10. United States Congress	0	1	2	3	4	5

C. Published Media						
1. The New York Times	0	1	2	3	4	5
2. The Daily O'Collegian	0	1	2	3	4	5
3. Newsweek	0	1	2	3	4	5
4. Farm Journal	0	1	2	3	4	5
5. Journal of Applied Communications	0	1	2	3	4	5
6. Daily Oklahoman	0	1	2	3	4	5
7. People Magazine	0	1	2	3	4	5
8. Wall Street Journal	0	1	2	3	4	5
9. National Geographic Magazine	0	1	2	3	4	5
10. Acres U.S.A. – A Voice for Eco-Agriculture	0	1	2	3	4	5

D. Broadcast and Online Media						
1. Facebook	0	1	2	3	4	5
2. Twitter	0	1	2	3	4	5
3. National Public Radio (NPR)	0	1	2	3	4	5
4. Cable News Network (CNN)	0	1	2	3	4	5
5. Fox News	0	1	2	3	4	5
6. Cable-Satellite Public Affairs Network (C-SPAN)	0	1	2	3	4	5
7. Rural Free Delivery TV (RFD-TV)	0	1	2	3	4	5
8. Your Local News	0	1	2	3	4	5
9. American Broadcasting Co. (ABC) News	0	1	2	3	4	5
10. Wikipedia	0	1	2	3	4	5

Where do you live?

1. On a farm 2. Rural (town under 10,000) 3. Town (10,000-50,000)
4. Suburbs of city (Less than 50,000) 5. Central Cities (greater than 50,000)

How often do you check the following?

1. Facebook account
   a. Daily b. Weekly c. Monthly d. I do not have an account
2. Twitter account
   a. Daily b. Weekly c. Monthly d. I do not have an account
3. Personal email account
   a. Daily b. Weekly c. Monthly d. I do not have an account

Were you involved in FFA?

1. Yes 2. No

Were you involved in 4-H?

1. Yes 2. No

What is your sex?

1. Male 2. Female

Politically speaking, which of the following would you describe yourself as?

1. Conservative 2. Moderate 3. Liberal

What is your major?

1. _____

APPENDIX E:

Script

Good morning, my name is Kirk Kimmelshue and I am a graduate student in the agricultural education, communications, and leadership department here at Oklahoma State. This morning, I am asking you for your assistance in helping me collect data for my graduate research thesis. I want to emphasize before we begin handing out the instrument that this process is completely voluntary. If you do not wish to complete the instrument, that is completely fine. Further, if you are not at least 18 years old, we ask that you do not complete the instrument.

If you do choose to complete the instrument being handed out, what you will see first is a student information page. That is yours to take with you, so that you know the information about the study, and so you have my contact information, should you wish to get ahold of me after today's class. Next, you will see the instrument. You will see five separate sections. In the first four sections you will see sets of sources that you are asked to rank based on your level of trust for the given sources for agricultural news and information as indicated in the directions. In the fifth and final section, we are asking some student characteristic information about you. Fill it out to the best of your ability.

There are no right or wrong answers on this instrument. Today, no matter how you fill this out, everyone will be getting 100%. Are there any questions at this time? If not, we will now being handing out the instrument. You may fill it out in pen or pencil, and then return it to me when you are done. You can either raise your hand when you have completed the instrument and I will come and get it from you, or we will collect them all in approximately 10 minutes when everyone is through. I want to stress again that this is completely voluntary, however if you wish to participate I greatly thank you for your participation.

APPENDIX F:

Other Organizational Involvement

Organizations Not Included in Table 3

Academic Club
American Quarter Horse Association
Army Guard
Athletic Trainer
Beta Club
Business Professionals of America
Campus Crusade for Christ
Chemistry Club
Choctaw Nation Youth Advisory Board
Colorguard
Drug Free Youth
Fish Club
Fishing Clubs
FIT
High School Rodeo
Hockey
International Club
Journalism Club
Jr. Breed Association
JROTC
Language Group
Latin Club
Link Leaders
National Youth Leadership Council
Native American Heritage Club
Native American Student Association
Out of State Volunteer
Pre-Med Society
Red Cross
Science Club
Service and Leadership
Skills USA
Sorority Pledge
Spanish Club
Speech & Debate
Student Conservation Association
Technology Student Association
United States Pony Club
Varsity Cheerleading
Varsity Choir
Yearbook
Young Republicans

APPENDIX G:

Complete Listing of Other States & Countries

Complete Listing of States & Countries not listed in Table 9

States

Arizona
Colorado
Connecticut
Florida
Georgia
Michigan
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
South Carolina
Tennessee
Washington
Wisconsin

Countries

Israel
Venezuela
Vietnam

VITA

KIRK EDWARD KIMMELSHUE

Candidate for the Degree of

Master of Science

Thesis: OKLAHOMA STATE UNIVERSITY FRESHMAN-LEVEL STUDENTS' TRUST IN SOURCES FOR INFORMATION ABOUT AGRICULTURE

Major Field: Agricultural Communications

Biographical:

Personal Data: Born in Chico, California, on February 19, 1988, the son of Tod and Sherrill Kimmelshue, one younger brother, Chad, who attends California Lutheran University in Thousand Oaks, California.

Education: Graduated from Pleasant Valley Sr. High School, Chico, California, in May 2006. Received Bachelor of Science degree in Agricultural Business from California Polytechnic State University, San Luis Obispo in June 2010. Completed the requirements for the Master of Science degree in Agricultural Communications at Oklahoma State University, Stillwater, Oklahoma in May 2012.

Experience: Completed a public policy and communications internship with the National Cattlemen's Beef Association from September 2011 – December 2011. Employed as a graduate teaching assistant in Agricultural Communications at Oklahoma State University from August 2010 – December 2011. Completed a summer public relations and affairs internship with the Oklahoma Farm Bureau Federation from May 2011 – August 2011. Served as a farm-marketing intern with Cargill AgHorizons from June 2009 – September 2009.

Name: Kirk Edward Kimmelshue Date of Degree: May, 2012

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: OKLAHOMA STATE UNIVERSITY FRESHMAN-LEVEL STUDENTS' TRUST IN SOURCES FOR INFORMATION ABOUT AGRICULTURE

Pages in Study: 101

Candidate for the Degree of Master of Science

Major Field: Agricultural Communications

Scope and Method of Study: The population of this study was composed of all freshman-level students in the College of Agricultural Sciences and Natural Resources (CASNR) at Oklahoma State University (OSU) (N = 500) and sought to determine the perceived trust level these students had for selected sources for news and information about agriculture. The study was descriptive in nature and employed a survey research design to allow 40 sources for news and information on agriculture to be rated on a five-point summated-rating scale for level of trust as well as to allow identification of selected personal characteristics.

Findings and Conclusions: Nearly 65% of the respondents were female, and nearly 50% were majoring in animal science or pre-veterinary medicine. Prior to coming to OSU, 57.2% of the students lived on a farm, in a rural area, or in a small town, and nearly 65% were from Oklahoma. More than 84% check their email and Facebook accounts daily, 52.8% were religious youth group members, and 48.1% were FFA members. Nearly half identified their political ideologies as conservative.The people most trusted for information about agriculture by freshman CASNR students at OSU are their parents, peers, and professors. Of the people selected for them to consider, they trust least Oprah Winfrey, Rush Limbaugh, and Michael Pollan. Freshman CASNR students trust the National FFA Organization, the National 4-H, the United States Department of Agriculture, and the Oklahoma Department of Agriculture, Food, and Forestry more than the other organizations selected in the study. Students least trust the People for the Ethical Treatment of Animals (PETA). CASNR freshmen students trust the agricultural news found in national newspapers like the *The New York Times* and the *Wall Street Journal* as well as the *National Geographic* magazine. In contrast, they lack trust for *People* magazine. Students trust Fox News, ABC News, and their local television news more than the other selected sources for online and broadcast media. Even as connected as they indicate they are to Facebook and email, the students least trust Twitter and Wikipedia for agricultural information. Future research should investigate the level of trust other groups have for these selected sources of news and information about agriculture.

ADVISER'S APPROVAL: Dr. Shelly Peper Sitton