

THE FOOD DIALOGUES: ANALYZING SOCIAL
PRESENCE IN #FoodD TWEETS

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PRESENCE IN #FoodD TWEETS

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CHAPTER I

INTRODUCTION

Background and Setting

Communication plays a vital role in telling the story of agriculture, which is one of today's most efficient and life-sustaining industries. Agricultural communications first began in the early-to mid-19th century when advancing technologies progressively influenced farmer-to-farmer communication (Boone, Meisenbach & Tucker, 2000). Throughout the years, this discipline has utilized emerging communication technologies to facilitate its purposes, including the latest method of computer-mediated communication (CMC).

CMC is defined as “any human symbolic text-based interaction conducted or facilitated through digitally-based technologies” (Spitzberg, 2006). Many different formats of CMC include email, chat rooms, instant messaging, text messaging, and Internet-based social networking. For many people, these platforms have become an important part of their daily routines, making their computers interpersonal (Walther & Burgoon, 1992). Throughout the years, the relational value of the emerging social environment of CMC has been debated, particularly as to whether human relationship can occur without face-to-face (FtF) communication. Research regarding CMC has concluded CMC can be both task and social-emotional oriented (Yuliang, 2002).

More than 78% of North American people use the Internet (Internet World Stats, 2011), making social networking accessible and one of the fastest-growing online activities. The idea of agriculturalists using social media to exchange information with

each other or with the public was unheard of a decade ago. Today, 98% of farmers and ranchers ages 18 to 35 years have Internet access and 76% of them use social media (American Farm Bureau Federation, 2011).

With more than 200 million users worldwide in 2011, Twitter has been called the short messaging system (SMS) of the Internet (Twitter, 2011). It offers users a micro-blogging experience by maintaining brevity in sharing news and personal information through “an information network made up of 140-character messages called tweets” (Twitter, 2011). Twitter requires users to create and register a username. It offers a less gated method of communication because it allows users to interact with others they may not otherwise have met and tweets are recorded in a public or private timeline for others to follow (Tweeter.net, 2011). Hash tags, represented by a “#,” aide in categorizing tweets and searching for tweets about specific topics.

While different types of social media capabilities exist, this study looks particularly at the use of Twitter and the social presence theory during a national, one-day multi-social media event named The Food Dialogues. On September 22, 2011, the U.S. Farmers & Ranchers Alliance (USFRA) created The Food Dialogues to answer America’s food industry questions through a live, multi-media event. Selected industry leaders appeared in four panel discussions in Washington, D.C.; New York; Fair Oaks, Indiana; and Davis, California. The town-hall style format invited the public to join the conversation in a variety of ways: on-site face-to-face communication, online streaming video, Facebook, and Twitter. The hashtag #FoodD was created to facilitate the tweeted conversations of people interested in sharing their viewpoints.

Statement of the Problem

The evolving nature of social media platforms, like Twitter, and computer-mediated communications have yet to produce an abundance of research that examine social presence connections, especially in agriculture. An understanding of online learning, socializing, and influencing others without face-to-face connections will advance future communications. A 2011 research study examining social variables, perceived social presence, and participant satisfaction in a Twitter analysis, found respondents agreed that a Twitter conversation is “a social form of communication that conveys a sense of feeling and emotion, permits the building of trust relationships, and provides a useful learning experience” (Pritchett, 2011, pg. 88). Moreover, research is needed to examine how social presence applies to computer-mediated communication, specifically social media, and whether community presence and relationships can be determined.

Purpose of the Study

The purpose of this study was to describe dimensions of social presence that existed during The Food Dialogues event on September 22, 2011, by examining participants’ tweets using the #FoodD hashtag on Twitter.

Research Objectives

The following objectives were established to accomplish the purpose of this study:

1. Use established indicators within social presence dimensions to classify the content of selected tweets with the hashtag #FoodD.
2. Determine the social presence dimensions found in selected tweets tagged with the hashtag #FoodD.

3. Determine modifications needed to refine Rourke et al.'s (2001) Model and Template for Assessment of Social Presence for use with social media content.

Scope of the Study

The study examined archived tweets tagged with #FoodD during The Food Dialogues live, kick-off event from 11:55 a.m. to 4:18 p.m. Eastern Standard Time on September 22, 2011. Participants were able to contribute to the discussion through this computer-mediated platform without end-date restrictions. The study examined all tweets from just prior to the start of the timed event through its conclusion.

Significance of the Study

Social networks have provided a new speed through which business and media information can be disseminated. Yet, the fast rise in popularity of these platforms and the lack of face-to-face communication has its challenges (An & Frick, 2006). Researchers have identified misunderstandings, confusion, and disruptions that lead to an unsatisfactory experience.

Assumptions

The study was based on the following assumptions:

1. The participants intended to participate in #FoodD discussions.
2. That all virtual participants were honest in their conversation responses.

Limitations

The study is subject to the following limitations:

1. Results may not be generalized to other hashtags not included in the scope of the study.
2. Tweets were correctly tagged as #FoodD.
3. Social cues are subjective and problematic to gather (Biocca & Harms, 2002).
4. Twitter was not the primary means of interaction during the event.

Definition of Terms

The following definitions will be used for this study:

1. Computer-mediated communication (CMC) - a method of exchanging information through a form of digital technology without face-to-face-communication (Spitzberg, 2006)
2. Emoticons – keyboard characters such as, “:0),” used in computerized communications to represent facial expressions or emotions (Gajadhar & Green, 2005)
3. Face-to-face communications (FtF) – the presence of visual and auditory cues (Vrasidas & McIsaac, 2000)
4. Hashtag – symbolized with the use of a “#” to categorize Twitter messages and identify keywords or topics (Twitter, 2011)
5. ReTweet (RT) – a Twitter feature allowing participants to share specific tweets with others (Twitter, 2011)
6. Social presence - a standard communication medium occurring through CMC and is the degree of feeling, perception, and reaction that ensues (Tu & McIssac, 2002).

7. Tweet – a Twitter message containing 140 characters or less (Twitter, 2011)
8. Twitter – facilitates short, computer-mediated conversations between people who have a registered username and who may or may not know each other (Twitter, 2011)
9. Username – a unique identification name containing 15 characters or less used in sending messages; also known as a Twitter handle (Twitter, 2011)

Chapter Summary

Agricultural communications has adopted technological changes, including computer-mediated communication through the years to reach audiences effectively. As social media usage has increased, micro-blogging platforms such as Twitter have emerged, allowing participants to communicate without face-to-face exchanges through short, computer-mediated messages called tweets. Social media communication challenges traditional communications methods and raises questions about whether relationships or connections can be made without more human interaction. This study analyzed social presence dimensions and indicators in the Twitter #FoodD conversation during a specific time period around The Food Dialogues. The national event provided a platform for agriculturalists and consumers to discuss food industry issues using a variety of communication media. This study's purpose and objectives will contribute to further research studies that observe how media and information influence relationships and thought process. It will also further aid the exploration of determining if inadequacies of present assessment models exist when used in social media analysis and whether new indicators are needed.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Communication has experienced significant changes throughout the years with the growing usage of the Internet and mainstream popularity of social media. The communication movement has shifted from face-to-face (FtF) to computer-mediated (CMC). The impacts of social media, such as Twitter, continue to be explored as more research studies develop. With information flowing at a faster speed than ever before, this new era in communications has created an interest in the way people interact socially and how connections affect communication skills effectively (Kehrworld, 2008). Social media activities connect individuals and groups in the exchange of information and encourage cooperation with each other in an instantaneous way that geographically might never have been possible without this digital medium. A historical background of computer-mediated communication, web technologies, social media, agricultural literacy and social presence should be understood to better equip academic disciplines like agricultural communications in its communications goals.

The History of the Internet and Computer-Mediated Communication

Historical beginnings of the Internet can be traced to the early 1960s when inventors dreamed of a time when computer networking would bring together people, hardware, and software (Licklider & Taylor, 1968). The Internet was created in response to a military need. Soon after the 1957 launch of the first Soviet Union satellite, Sputnik I, United States President Dwight Eisenhower formed the Advanced Research Projects Agency (ARPA) to further U.S. technology, to protect against future Soviet attacks, and preserve communication channels in the event of a military crisis (LivingInternet, 2000). ARPA was instrumental in the formation of the Information Processing Techniques Office (IPTO) which funded and advanced computerized communication research.

The idea of packet switching, breaking information into smaller packs which are independently transmitted and then sent back, led the way for the formation of packet-switching network, ARPANET, and later the TCP/IP communication protocol which created the foundation for the Internet (LivingInternet, 2000). In the 1990s, the National Science Foundation (NSF) constructed the NSFNET between several supercomputer universities to share information giving rise to the popularity of the document linked World-Wide Web and the explosive use of mass communications through the Internet. Today, more than three-fourths of people in North America use the Internet (Internet World Stats, 2011) as digital gateways to other linked computers. The Internet invites users to gather information, communicate, and interact; people also use the Internet to create or foster existing relationships, however, it also can be isolating and impersonal (Madden, 2006; Kraut et al., 1998; Morahan & Schumacher, 2003; Nie, 2001). One topic that continues to generate discussion among researchers is the effect of Internet use on interpersonal connectivity (Sproull & Kiesler, 1991).

While the Internet has many facets, computer-mediated communication (CMC) is defined as human symbolic text-based interaction conducted or facilitated through digitally-based technology (Spitzberg, 2006). Researchers began studying the effects of CMC in the late 1980s. People use some form of CMC as part of their daily routines through email, chat rooms, instant messaging, text messaging, and Internet-based social networking. CMC facilitates online learning and gives users the freedom, time, and “ability to support high levels of responsive, intelligent interaction” (Rourke, Anderson, Garrison & Archer, 2001, pg. 2). Communication can occur synchronously, or real-time, and asynchronously, allowing messages to be sent and received with a time delay (Hrastinski, 2008).

Computers help form a social network, but the network does not guarantee authentic relationships will form. Several distinguishing characteristics are often noted when discussing CMC. They are often longer, more idea stimulating, and encourage greater participation, but comprehension problems can occur (Bordia, 1997). Early research studies found the absence of social context cues creates communication challenges; users are treated the same in social media: trusted friend or total stranger, with little or nothing in between (Sproull & Kiesler, 1986; Gilbert & Karahalios, 2009). Over time, distance learning and teacher immediacy studies have shown evidence of interpersonal interactions and have expanded CMC values. However, recent social media studies aim to examine a variety of CMC interests, such as how people use online media, form connections, and exchange language such as emoticons. CMC has been found to be both task and social-emotional oriented (Yuliang, 2002).

Web 2.0 Technologies, Social Media and Social Networks

People participate in CMC through interactive Web 2.0 technologies and social media applications on the Internet. Most of these technologies are free and easy to use, as well as rewarding for those who wisely make use of their potential (Paulson, 2009). Web 2.0 goes beyond providing basic user information. Web 2.0 refers to a group of technologies such as blogs, wikis, podcasts, and Rich Site Summary (RSS) feeds working to connect people, which enable a more socially joined Web where everyone is able to add to and edit the information space (Anderson, Hepworth, Kelley & Metcalfe, 2007).

Social media is defined as using electronic communications to share information through online communities (Merriam-Webster, 2011). This creates a two-way street of communication allowing participants, for example, to bookmark other websites, comment on news stories, share pictures, add information to online definitions, and be part of group discussions. Group dynamics occur through social media using network sites. According to Boyd & Ellison (2007), social web-based networks allow individuals to 1) build public profiles within a restricted system, 2) share information based on a connection with other users, and 3) observe and overlap their connections with others in the structure. Social networking examples include formal and informal interactions through popular sites such as Facebook, LinkedIn, MySpace, and Twitter. Social network sites generally require participants to provide some basic, personal information upon registration and possible identification of others with whom they are connected. Not all sites require bi-directional confirmation on relationships, which are often referred to as fans, friends or contacts (Boyd & Ellison, 2007). The label for these relationships

can be misleading as the connection does not always mean a traditional friendship and there are various reasons connections are made (Boyd & Ellison, 2007).

The History and Evolution of Twitter

While many types of connections are established through social media, this study examines the use of the free networking site, Twitter. Twitter is a real-time micro-blogging tool that began in 2006 to connect people to ongoing information (Twitter, 2011). Microblogs are brief messages sent to a network of contacts (Jansen & Zheng, 2009). Originally known as “twtr,” creator Jack Dorsey decided that Twitter was a perfect name for short bursts of information similar to bird chirps. Twitter messages, known as tweets, contain 140 or less characters and are topically categorized by the use of hashtags symbol before a group label, such as #Agriculture. Today, Twitter has more than 200 million users worldwide. Headquartered in San Francisco, USA, Twitter is available in six languages: English, French, German, Italian, Japanese, and Spanish (Twitter, 2011).

In order to join Twitter, participants register for a username which provides users with a unique, online identifier. Twitter allows the exchange of messages from a variety of platforms, including the Twitter website, related applications, and phones with adapted technology (Paulson, 2009). Three types of Twitter users typically emerge: information sources, friends, and information seekers (Java, Finin, Song & Tseng., 2007). Tweets represent what is happening not only personally, but also locally and globally. Twitter relationships can be one-way or two-way. Two-way relationships occur when people follow each other, whereas a one-way relationship may happen when a person follows another person but is not followed in return (Allen, Abrams, Meyers & Sultz, 2000).

Rather than acting solely as a billboard for announcements, Twitter provides a way of holding conversations with people who matter (Comm, 2009). Users also have access to a variety of other benefits, such as posting photos through third-party applications such as Twitpic (Twitpic, 2011). Twitter is a less gated form of communication compared to other methods, and the short, informal structure of it is a reprieve from email and instant-messaging systems (Tweeter.net, 2011). There is no requirement to participate in Twitter after registration. Some people using Twitter will never tweet; they will read and gather information on their interests without a written contribution (Twitter, 2011).

Despite inconsistencies, Twitter has become advantageous not only for broadcasting personal information, but for use in business marketing and public relations. Organizations rely on Twitter for announcing news and blog posts, relating with consumers, or in facilitating group communication (Tweeter.net, 2011). The idea of forming groups to effectively communicate can be found through online literacy communities or virtual twibes. Twitter twibes are groups made up of like-minded Twitter users created in a variety of topic areas with linking hashtags (Twibes, 2010).

Twitter and Agricultural Literacy

In the field of agriculture, an example of a popular twibe can be found at the location, www.twibes.com/group/agriculture. This twibe, specifically created for people interested in food, fuel and fiber is a discussion format for groups such as #AgChat and #GardenChat (Allen et al., 2010). These tweeted conversations are generally moderated by an individual and occur once a week during designated time periods. #AgChat has been described as the largest online agricultural conversation, drawing the attention of news media and people outside of the agricultural community (AgChat Foundation,

2011). Over the years, agricultural communications has embraced emerging technologies to facilitate online literacy as a tool to understand and expand communications between agriculturalists and consumers.

Aiming to help bridge the informational gap, agricultural literacy, or advocacy, is defined as having knowledge and understanding of our food and fiber system (Frick, Kahler & Miller, 1991). Social media and networking sites, such as Twitter, are now part of everyday life for the majority of the younger generation of farmers and ranchers (AFBF, 2011). The trend of using social media by farmers goes beyond traditional routines of checking markets and temperatures, as a rising numbers of farmers help consumers understand agriculture (Rodriguez, 2009). With fewer than 2% of America's workforce involved in farming today and the absence of required agricultural education courses, a large number of people have a growing disconnect to rural life (Mayer & Mayer, 1974).

The rising interests in agricultural issues have led the way for growth in education and communication strategies. Twitter combines social media and literacy in effective exchanges, even in crisis communication responses. One of the first uses of this strategy was the 2009 salmonella outbreak from a Georgia peanut plant which prompted the U.S. Food and Drug Administration to use Twitter in its wide-reaching crisis management plan to ease consumer fears (Allen et al., 2000).

Former research has focused more on agricultural literacy than social media in attempt to measure knowledge, while more recent studies have sought to determine what people understand about the food and fiber system (Trexler & Hess, 2004). Available web analyzing tools make collecting social media data on interactions, tweet flow,

followership change, and brand salience easier and more accessible than ever-before. While the outlook appears good for agriculture's social media use, it may still be too early to determine the impact on public opinion (Rodriguez, 2009).

#FoodD and The Food Dialogues

This particular research study examined public conversations and social media through a study of Twitter #FoodD conversations. According to AgChatFoundation (2011), #FoodD began as a micro-blogging experience in April 2009 to create better connections between farmers and consumers regarding food. It was one of several social media networks used in conjunction with the kick-off communication initiative called The Food Dialogues in September 2011.

The event was hosted by the U.S. Farmers and Ranchers Alliance (USFRA), a group of more than 50 agricultural entities and their partners (USFRA, 2011). USFRA affiliates include various state farm bureaus and association councils. USFRA partners include companies and organization such as, John Deere, DuPont, Monsanto, Elanco, Farm Credit, and Agri-Marketing and Agri-Pulse. The group collaborates in answering Americans' food concerns while caring for animals and preserving businesses and communities (USFRA, 2011). The alliance is 75% supported by farmers and ranchers and its goal is to listen, to answer questions, and to give agriculturalists a forum to speak about agriculture (USFRA, 2011). Prior to September, 2011, a nationwide USFRA consumer survey gathered responses from more than 2,400 participants. Findings indicated consumers know very little about the food-to-table process but think continuously about it. Furthermore, consumers disagreed about the future of agriculture, but they share the same values as farmers and ranchers. The survey also found farmers

and ranchers are aware of the gap in understanding between consumers and their food. (USFRA, 2011)

The creation of the Food Dialogues marked the beginning of intentional conversations between agricultural groups at the state, regional, and national levels in addressing Americans' food questions (USFRA, 2011). By initiating a dialogue, USFRA is aiming to create an ongoing forum where people caring about the future of food can also discuss healthy choices for all people. USFRA invites people who may not always agree with traditional philosophies to participate in hopes some common ground will be found in the process and good consumer choices can be made (USFRA, 2011)

On September 22, 2011, The Food Dialogues were launched at approximately 12:15 p.m. Eastern Standard Time through four town hall discussion panels in Washington, D.C.; New York; Fair Oaks, Indiana; and Davis, California. USFRA used industry experts to lead the conversations through a streaming live broadcast covering a variety of agriculture related food subject titles: The Voice of Farmers and Ranchers, The View from 30,000 Feet, The Future of Agriculture, and From Farms and Ranchers to Menu and Check-out Counters. Multiple social media venues were also used to bring people into the discussion: Twitter, Facebook, Flickr, YouTube, email and RSS feeds. While many different conversations occurred during the day regarding this event, this study focused on only Twitter conversations with the specific hashtag, #FoodD, during the live event. The intent of the research examined tweets for social presence.

Social Presence Theory

The theoretical framework for this study is social presence. Social presence is a standard construct used to describe how people interact in online learning. Although it

can be difficult to define, it has been recognized as a way of examining what occurs during conversation and the differences between different types of communication (Short, Williams & Christie, 1976).

First developed by Short et al. (1976) as a way to make sense of CMC findings in telecommunications, social presence was used in un-mediated comparisons and was referred to as a level of salience, or prominence, between two people in a communication medium (Short et al., 1976). People were thought to be able to differentiate between media through degrees of social presence. The higher the degree of social presence, the more warm, sociable, and personal that medium was perceived to be. The opposite was also true. Over time, the way social presence originally was defined changed to a broader sense of interpersonal relationships and researchers began exploring how people compensated for lack of cues and how communities was formed.

CMC and social presence research is often easier to find conducted in business rather than educational settings. CMC is dependent on its surrounding discourse for meaning and noted there are no typical CMC messages (Herring, 2007). Despite its socialness, online or “virtual” education initially was criticized for the belief that teaching and learning would be disrupted without social cues (Berge & Collins, 1995). In 1992, Walther developed a social information processing model that contended human’s social nature is the same in CMC and face-to-face communication and that given adequate time and commitment, CMC can even be hyper-personal (Walther, 1992; 1996). While many descriptions of social presence exist, researchers often identify social presence as having CMC similarities and it is recognized as the degree of feeling, perception, and reaction that ensues (Tu & McIssac, 2002).

Social Presence Measurements

Measuring social presence is important in testing social presence theories and furthering communication research. The London-based Communications Studies Group conducted research studies on 1970s communication media focusing on people's attitudes toward different forms of media communication (Pye & Williams, 1978). While these early studies cited visual cues as necessary components, more recent studies found visual cues are helpful but are not a requirement for effective communication (Christie & Kingan, 1997). Correlations exist between social presence and learning communities (Rourke et al., 2001). While a variety of instruments exists, some measurements of social presence have been found to be highly subjective and are difficult to collect (Biocca & Harms, 2002). Much attribution is owed to recent pioneers such as Gunawardena and Zittle (1997), Rourke et al. (2001), and Tu & McIsaac (2002) for their contributions to the theory in more recent years.

Gunawardena's (1995) contribution to social presence included the development of a 17 item bipolar scale focused on students' ranks of perceptions of the medium. In time, a more refined instrument was introduced, the social presence scale, which was thought to be more effective than the previous scale by allowing participants to determine a rank from 1 to 5 on a questionnaire of their levels of agreement or disagreement with the effectiveness of CMC (Gunawardena & Zittle, 1997).

Soon, a new online learning classification system was introduced with three social presence dimensions: affective, interactive and cohesive. This system of measurement included 12 indicators for use in analyzing online transcripts. Affective responses include expressions of emotions interpreted through warmth, openness and affiliation.

They are expressed in digital communications through affective indicators of emoticons, humor and self-disclosure (Rourke et al., 2001). Interactive responses include expressions of support and encouragement and are expressed through indicators of continuing a thread, quoting from other's messages, referring explicitly to other's messages, asking questions, complimenting/expressing appreciation or expressing agreement (Rourke et al., 2001). Cohesive responses include expressions of creating or sustaining a group and are expressed through indicators of vocatives (referring to names), addressing/referring to the group using inclusive pronouns, and phatics/salutations (social expressions)(Rourke et al., 2001). Research findings of this instrument suggest high inter-rater reliability in all indicators except for expression of emotions and use of humor. Furthermore, the study concluded that researchers may determine the indicators to be problematic and not always a requirement of classification. Rourke et al. (2001) also recommends the need for further studies of the instrument and verification of the indicators.

In time, an additional questionnaire instrument was created for social presence and privacy using pieces of other instruments to measure perceptions of social context, online communication, interactivity, and privacy in a student population (Tu & McIssac, 2002). Later conclusions revealed there are more variables that influence social presence than was once thought Tu & McIsaac (2002). Most researchers continue to acknowledge and use these measurements in describing social presence research.

Social Presence in Social Media Research

While social presence measurements exist, there are few research studies examining social presence in social media. However, in a recent 2011 study of the

perceptions and expressions of social presence during Twitter conversations, findings indicated social presence to be present and the satisfaction and the relationships among them influence satisfaction in CMC (Pritchett, 2011). The researcher adapted the Rourke et al. (2001) model and template for assessment of social presence in the classification of archived #AgChat and #GardenChat tweets. The study also identified social variables and participant satisfaction through an online questionnaire. Overall, respondents agreed to statements indicating Twitter conversations as a form of social communication conveying emotion, building trust and providing a useful experience (Pritchett, 2011). The study further revealed, by using the three social presence dimension categories, most Twitter messages were interactive in nature. Research recommendations include encouraging agricultural communicators to support CMC and use social presence behavior in online interactions (Pritchett, 2011). Additionally, it was suggested more research should be conducted to determine how feeling and emotion are best conveyed, to determine if social presence in other forms of CMC, and to improve social presence measuring methods. These findings were the basis for research in this present study.

Chapter Summary

The formation of the Internet began in the 1960s as a response to military communication concerns after the launch of the Soviet Union satellite, Sputnik I (LivingInternet, 2000). Through a process of research development, a series of networks were created over time to link computers together and share information. Today, the majority of people in North America have access to the Internet (Internet World Stats, 2011).

As society shifts away from traditional face-to-face interaction, questions have developed to explore the relational value of computer-mediated communications (CMC).

CMC is defined as text-based interaction using digital technologies (Spitzberg, 2006). Interactions can be either synchronous or asynchronous (Hrastinski, 2008). While CMC encourages greater participation, problems can occur without social cues. However, previous studies suggest that CMC is task-and social-oriented.

Web 2.0 provides the capabilities for people to participate in CMC through a variety of online technologies such as blogs and podcasts (Anderson et al., 2007). Social media has become a popular form of computer-mediated communication and encourages the formation of groups through social networks. Facebook and Twitter are popular networking sites. Research initiatives have emerged with CMC advancement to evaluate if social media, such as Twitter, are effective in creating “real” social connections.

The inception of Twitter as a real-time microblogging tool began by connecting people through short messages in 2006 (Twitter, 2011). Its worldwide infusion in the field of agriculture has brought people together through real-time informational and personal conversations. Twitter is a less gated form of communication and can establish one-way or two-way relationships (Tweeternet, 2011; Allen et al., 2000). Virtual Twitter groups, called twibes, share similar interests and help further the process of agricultural literacy through groups such as #AgChat and #GardenChat (Twibes, 2010).

A rising disconnect over agricultural issues has inspired a need for literacy. Agriculture communications has embraced rising technologies in agvocacy efforts and utilizes social media, such as Twitter, to bridge the informational gap and help consumers understand agriculture (Rodriguez, 2009). In an effort to facilitate a round-table discussion of some of America’s important food questions, The Food Dialogues event began on September 22, 2011, with a four-panel program to combine a variety of social

media connectors including the use of Twitter, #FoodD, to facilitate responses. The goal of The Food Dialogue event, hosted by the U.S. Farmers and Ranchers Alliance (USFRA), was to address American's food questions (USFRA, 2011). This event provided the setting for this research study.

Social presence was also identified as the theoretical framework for this study. Social presence is defined as the degree of feeling, perception, and reaction that occurs in communication (Tu & McIssac, 2002). A variety of existing social presence measurements was discussed to further explain this theory. Researchers have used bipolar, point scales, questionnaires (Gunawardena, 1995; Gunawardena & Zittle, 1997; Tu & McIssac, 2002) and social presence dimensions in qualitative analysis (Rourke et al., 2001).

Research studies have shown social presence can exist; however, there are limited research studies combining social presence and social media. The Pritchett (2011) research study of the perceptions and expressions of social presence during Twitter conversations was discussed and recommendations for further social media research and assessment model refinement were noted.

CHAPTER III

METHODOLOGY

Chapter Overview

Previous chapters discussed the problem, purpose, objectives, scope, and significance of this research study. The literature review provided a deeper understanding of the history and background pertaining to the Internet, computer-mediated communications, Twitter, agricultural literacy, social media, The Food Dialogues, and social presence. This chapter describes the methods and procedures used to conduct the research. It also discusses the design, population, data collection and data analysis.

Institutional Review Board

Approval from the Institutional Review Board was not required for this study. This study did not involve the use of human subjects.

Research Design

A qualitative content analysis of The Food Dialogues Twitter, #FoodD, transcripts was conducted to accomplish the purpose and objectives of this study. Content analysis is defined as a systematic way of evaluating a body of texts, images and symbolic matter (Krippendorff, 2004). All tweets were categorized into three main dimensions and 12

indicators using the Model and Template for Assessment of Social Presence created by Rourke et al. (2001) (see Appendix A). Individual tweets were sequentially classified, using Microsoft Excel, based on content and category definitions into three main social dimensions with corresponding indicators. Only the message content was considered. The username was not displayed. Each tweet had the potential to be classified in multiple dimensions or indicators. The first dimension was affective and included three indicators: expression of emotions, use of humor, and self-disclosure. The second dimension was interactive and included six indicators: continuing a thread, quoting from others' messages, referring explicitly to others' messages, asking questions, complimenting/expressing appreciation, and expressing agreement. The final dimension was cohesive and included three indicators: vocatives, addresses/refers to the group using inclusive pronouns, and phatics/salutations. A column labeled, "other," was added to each dimension for non-conforming messages.

Population

This study examined specific Twitter messages around the given time of The Food Dialogues event on September 22, 2011. Tweets (N=3,631) archived as #FoodD during the video simulcast were received during a 4-hour, 23-minute time period. The population was selected specifically for describing the content of the food conversation during this event, which had multiple layers of communications occurring. Participants were able to respond regarding the content of the live town-hall meeting in addition to the content of other Twitter users' messages.

Qualitative Data Collection

An archived collection of messages was collected from a 4 hour, 23-minute period of the Twitter #FoodD conversations on September 22, 2011, using an online collection tool, The Archivist. The coding process included the examination of each tweet in sequential order by two researchers using a Microsoft Excel spreadsheet. The data sheet contained multiple columns. One column contained all the tweets separated by rows. The other columns were created to mark each affective, interactive and cohesive dimension indicators. The spreadsheet also allowed for a column within each dimension to mark tweets as “other.” Researchers were able to classify each tweet in one or more appropriate dimensions indicators. Researchers examined and marked the tweets, one at a time, for social presence. The data collected from the #FoodD archives contained the total number of Tweets (N=3,631) and usernames (N=587).

Dependability

Twitter conversations based on the selected population were analyzed to describe social dimension using Rourke et al.’s (2001) Model and Template for Assessment of Social Presence defined in Appendix A. To further establish dependability, two researchers coded the archived tweets based on the assessment tool to reach a consensus. The tweets were coded into corresponding dimensions and indicators. No prior coding communication occurred between the researchers.

Data Analysis

An archived collection of the #FoodD tweets from September 22, 2011, were selected to include only tweets that occurred at approximately the same time as The Food

Dialogues webcast. Beginning at 11:55 a.m. Eastern Standard Time, the data was collected and analyzed. To select a starting point of data collection, the researcher selected the user tweet, “Here we go #FoodD. Good luck!,” prior to the event kick off time. Tweet analysis ended with a final user tweet indicating the conclusion of the event, “#FoodD That’s a wrap!,” at 4:18 p.m. Eastern Standard Time. Two researchers classified individual tweets into columns of one or more of the dimensions indicators. An “other” column was also added to each dimension for unclassifiable tweets.

Affective tweets contained emotion, for example, “Wish I was able to watch & participate in #FoodD but I am on the road all day with little 3G :-(#agchat.” Interactive tweets contained meaningful interaction, such as “RT @Random: Want some fact checking? Follow me during the #FoodD Dialogues.” Cohesive tweets built group commitment, such as the example, “Getting reading to tweet about #FoodD with @random #FoodD.”

An example of a tweet receiving multiple codes would be, “@random with all do respect. A world without science, CSA's and farmers markets scare me. It's not one or another #FoodD.” The final results of the study were analyzed to determine social presence dimensions and indicators in conversations during The Food Dialogues, using #FoodD.

CHAPTER IV

FINDINGS

This study examined dimensions of social presence in The Food Dialogues, #FoodD, conversations. Past studies have questioned the relational value of computer-mediated communication without face-to-face communication. Research regarding CMC has concluded that CMC can be both task and social-emotional oriented (Yuliang, 2002). Research has also found CMC satisfaction is influenced by the inclusion of social presence and the satisfaction of the relationships among them (Pritchett, 2011). The objectives of this study will contribute to future research observing how media and information influence relationships and thought processes. It will also contribute to the initiatives of the *National Research Agenda for the American Association for Agricultural Education's Research Priority Areas*, specifically exploring impacts of social media research on user thoughts and behaviors (National Research Agenda, 2011).

The tweet population in this study was selected during a given time and coded by two researchers into dimensions and indicators presented in the Model and Template for Assessment of Social Presence defined in Appendix A (Rourke et al., 2001). Tweets were able to be coded in multiple categories: 1) affective indicators: expression of emotions, use of humor, self-disclosure; 2) interactive indicators: continuing a thread, quoting from others' messages, referring explicitly to others' messages, asking questions, complimenting/expressing appreciation, expressing agreement; 3) cohesive indicators:

vocatives, address/refers to the group using inclusive pronouns, and phatics/salutations. Furthermore, an additional “other” column was added under each dimension for tweets that were not able to be classified by existing definitions of indicators.

Background and Demographics

The Food Dialogues #FoodD conversations were captured and archived using The Archivist. Only the tweets corresponding to the kick-off event on September 22, 2011, which occurred from approximately 12:15 p.m. to 4:25 p.m. Eastern Standard Time were considered for qualitative analysis. The researcher reviewed more than the selected research data to determine a natural point to select beginning and ending tweets. The tweet collection included 587 participants and ranged from 11:55 a.m. to 4:18 p.m. Eastern Standard Time. The mean number of tweets per user was 6.19, the median number of tweets per user was 1.0, and the mode number of tweets per user was also 1.0. Contrary to other studies examining CMC, this #FoodD event was not formally moderated. The minimum number of user tweets was 1.0 and the maximum number of user tweets was 139.0. The content of the tweets leading up to the start of the online simulcast reflected announcements, questions, and interactive statements showcasing a mix of social dimensions that may also be present later in the conversation. The data also included 179 unique hashtags overall, including #FoodD, within the content of the messages (see Table 1, Appendix B).

Findings Related to Research Objective 1

The purpose of research objective one was to use indicators within social presence dimensions to classify the content of #FoodD. All established indicators within social

presence dimensions were found in the tweet population (N = 3,631). Since interactive tweets were found to be most prominent overall, data for the six interactive indicators were also significant, specifically continuing a thread, quoting from others' messages and referring explicitly to others' messages (see Table 1). All user names have been changed to protect anonymity.

Interactive Indicators

The most prominent indicators were interactive. Tweets coded as referring explicitly to others' messages were indicated as 65.27% of the data. An example of this indicator was, "If you have to say 'when I get my own kids to the farm' you do not represent average american farmers whose kids live there. #FoodD."

Tweets coded as quoting from others' messages were indicated as 56.21% of the data and contained messages such as, "Standards are high but sustainable and repeatable says #Pork Producer #foodD." Re-tweets within this indicator that had additional comments added on as an extension, such as "Protecting Natural Resources is crucial RT @Random: If we don't have good soil, we don't have farms. via #Random #FoodD," were coded this way.

More than half (52.13%) of the interactive tweets indicated continuing a thread. Responses containing re-tweets were coded this way, such as "RT @random: In #CA, #water is THE issue. #VanAlfen #FoodD."

Table 1
Dimensions and Indicators of #FoodD Tweets (N = 3,631)

Interactive	n = 3,238 (89.18%)	<i>n</i>	%
Referring explicitly to others' messages		2370	65.27
Quoting from others' messages		2041	56.21
Continuing a thread		1893	52.13
Other		326	8.98
Asking questions		278	7.66
Expressing agreement		183	5.04
Complimenting, expressing appreciation		175	4.82
<hr/>			
Cohesive	n = 554 (15.26%)	<i>n</i>	%
Vocatives		392	10.80
Phatics, salutations		126	3.47
Other		32	0.88
Addresses or refers to the group using inclusive pronouns		25	0.69
<hr/>			
Affective	n = 428 (11.79%)	<i>n</i>	%
Expression of emotion		319	8.79
Use of humor		66	1.82
Self-disclosure		59	1.62
Other		0	0.00

Note: Tweets can be classified into more than one category

Additional interactive indicators with less than 10.00% of total tweets each were asking questions, complimenting/expressing appreciation and expressing agreement. Asking questions appeared 7.66% of the time and included messages such as, “At what age do we reach students? As young as possible! #FoodD,” were coded this way. Messages containing, “yes” or “so true” were indicated as expressing agreement and were observed a total of 5.04% times. Tweets similar to “Loving the D.C. moderator. Doing a much better job than in Indiana. #FoodD” were indicated 4.82% and coded as complimenting/expressing appreciation.

Cohesive Indicators

The next prominent dimension, cohesive, had three indicators. About 11.00% of the tweets were coded as vocative when they were found to address participants by name, such as “@random I think Claire Shipman just asked ur question #FoodD.” Tweets containing group, social dynamics were indicated 3.47% and were coded as phatics/salutations such as this one, “Great to see all the FFA members in the audience! #FoodD.” Addresses or refers to the group using inclusive pronouns indicators were coded 0.69% of the time when messages contained words such as “we” or “us,” such as “AgSec Vilsack: This country needs us to come together. #FoodD.”

Affective Indicators

The least prominent dimension, affective, had three indicators. For example, expression of emotion was indicated 8.79% times and included expressive punctuation and keyboard emoticons, such as “@random, we are thinking a lot alike today :) everything you tweet I tweet! Lol! #FoodD.” Messages such as, “blah blah blah the science and data thing...#FoodD” were coded as use of humor, 1.82% of the time, because they contained joking and potential sarcasm. A self-disclosure tweet example was, “Have to take a lunch break! Will be back to #foodD momentarily (hate to miss a second!)” and represented 1.62% of the data.

Findings Related to Research Objective 2

The purpose of research objective two was to determine social presence dimensions in the content of #FoodD. All three established social presence dimensions were found in the #FoodD findings. Nearly all (89.18%) of the tweets were interactive, while 15.26% were cohesive and 11.79% were affective (see Table 1). Overall,

interactive tweets were the most prominent and occurred throughout the conversation when participants responded to or referenced ongoing tweets within the topic, such as “Interesting RT @random: More I listen 2 Food Dialogs, more convinced I am we need to engage customers not consumers. #FoodD.” All re-tweets (RT) were coded as interactive. Other interactive tweets included those asking questions, giving compliments or expressing appreciation.

Cohesive tweets were the next prominent dimension and contained messages contributing to the establishment of the community. These statements, including name references, social greetings, and group attribution, occurred throughout the conversation. Tweets such as, “Here we go at Davis in CA - this is MPK coming at you live from #FoodD. Great convo,” were coded as cohesive due to the group pronoun “we.” Participants directed the conversation and addressed the group collectively to reinforce the conversation structure. Cohesive tweets were defined as contributing to the general mood of the conversation.

Affective tweets were the least in number and contained emotion, humor, and personal admission. An example of an affective tweet was “Pork producers use everything but the squeal! #FoodD #pork #USFRA.” Affective tweets were found at different times throughout the conversation. These tweets included off-topic and unrequested information such as, “Hi!! Watching from the office. RT @random: Got email finally to let me into #FoodD & will watch some. I see @random2 in Indiana. Waving!”

Findings Related to Research Objective 3

The purpose of research objective three was to determine modifications needed to refine Rourke et al.'s (2001) Model and Template for Assessment of Social Presence. To determine if additional or different indicators may be needed, a column titled "other" was added to each social presence dimension for tweets that did not fit existing indicators. Only the "other" columns in the interactive and cohesive dimensions were used during coding (see Table 1). No data was found in the "other" column for the affective dimension.

Overall, interactive and cohesive "other" indicator columns totaled 9.86% of the overall tweets that did not fit into one of the other six interactive indicators. Examples of tweets coded as "other" interactive (8.98%) were, "Its easy 2 see who wants 2 engage & who has closed minds regarding 2 days ag & food. A clear need to bridge the divide" and "Most popular course start at UC Davis is nutrition. Fascinating. #foodD #foodchat." Most of these tweets were cooperative and had something to do with agriculture, but did not fit the description provided in the Rourke et al.'s assessment model. Tweets expressing disagreement also were placed in the "other" column.

Tweets demonstrating cohesiveness but that did not include a specific participant name or group pronoun but continued to direct users to group action such as, "Follow the @USFRA Food Dialogues event at <http://t.co/AGu9X6af> #FoodD," were coded (0.88%) as interactive "other."

CHAPTER V

CONCLUSIONS, RECOMMENDATIONS, & IMPLICATIONS

Chapter Overview

The growth of Internet usage in North America and among farmers and ranchers has increased the popularity of computer-mediated communications. Online interactions challenge traditional face-to-face communication and brings in question what type of social relationship is possible through social media, such as Twitter. It is important to identify and study social presence implications to further identify attributes needed to connect with others (Biocca, Harms & Burgoon, 2003).

The Rourke et al. (2001) assessment model for classifying tweets was used in this study. The model was originally used for analyzing social presence in online graduate-level courses rather than through a specific medium, such as Twitter. Findings of this study determined all social presence dimensions and indicators were present in analyzed messages of The Food Dialogues Twitter discussion using the hashtag #FoodD. However, some messages were unable to be coded in the established indicators. Overall, the conversation was predominately interactive with the majority of the tweets coded into three specific interactive indicators: continuing a thread, quoting from others' messages, and referring explicitly to others' messages. Only two dimensions, interactive and

cohesive, used “other” categories for tweets unable to be classified with the definitions determined in the Rourke et al. (2001) model. This study and its findings will contribute to the priorities of the 2011 National Research Agenda *for the American Association for Agricultural Education’s Research Priority Areas* which include exploring the impact of social media research on user thoughts and behaviors and researched needed to “expose the potential of these digital technologies and strategies in realizing a citizenry capable of making agriculture-related informed decisions” (National Research Agenda, 2011, p. 14). Furthermore, recommendations for practice and future research should be understood by agricultural communicators to enhance computer-mediated communications.

Conclusions and Implications Related to Research Objective 1

While all social presence indicators were found in the #FoodD conversations, most of the tweets were coded in one or more interactive indicators categories. Using indicators to describe social presence has been recognized as time consuming and may not provide substantial differentiating data depending on the objectives of the study (Rourke et al., 2001). However, the process of classifying indicators in this particular study provided a deeper understanding of social presence elements within the conversation. It also provided an awareness of indicator overlap in one particular dimension.

The significant number of tweets in three particular interactive indicators, all of which required the inclusion of part of another user’s message, further confirmed the interactive structure of Twitter where people often respond or follow each other in communications (Twitter, 2011; Allen et al., 2000). The format of Twitter allowed

people to respond by reposting someone else's information, thus making it possible within the Rourke et al.'s model for re-tweets to be coding in all three indicators: continuing a thread, quoting from others' messages, and referring explicitly to others' messages.

The purpose of the Food Dialogue event was to bring people together to exchange food industry ideas and concerns (USFRA, 2011). The number and type of indicators support the presence of real conversations occurring between real people in a two-way exchange that contributed to the overall purpose of the event. While most of the conversation focused on replies, sharing information and asking questions, it also contained cohesive and affective indicators.

While Rourke et al. (2001) suggested humor and emotion as being difficult to interpret and analyze, this study regarded the work and time required to further classify these tweets within specific indicators as an important part in determining social presence depth. The number of vocative and phatics/salutations indicators suggests people were creating a social connection by using each other's names and personalizing messages. This study provides important implications about the natural formation of social presence in online communications even when there is an absence of a moderator or formal structure; people still find a way to connect. Furthermore, it supports previous research studies by implicating as users are encouraged to disclose feelings, emotion and personal information, more online involvement occurs (Pritchett, 2011).

Conclusions and Implications Related to Research Objective 2

All social presence dimensions were present during #FoodD conversations. The dimension with the most number of tweets was interactive, followed by cohesive and then affective. Overall, the content of the messages reflected topics presented in the web simulcast; however, the analysis did find individualized conversations occurring within the conversation. No intended moderator or set structure was identified.

The prominent percentage of interactive tweets in this study confirms Twitter as a significant conversational strand and reiterates the human need to respond to something that is occurring. Meaningful interaction must have evidence that the other person is attending (Short et al., 1976). In this regard, Twitter played an important role in engaging users in the food conversation. Using Rourke et al.'s (2001) conclusions, the smaller number of cohesive and affective tweets, which help regulate group mood and promote vulnerability, suggests the #FoodD conversation was more pragmatic than personal. Given the scope of The Food Dialogue event to present specific topics, and given the opportunity new people to come together, it seems justifiable that interactive communications would be the most prominent. More cohesive and affective tweets may have existed with the presence of a moderator who was intentional about promoting these areas or if more time and tweets had been included in this study. People who share strong ties are more likely to disagree and provide critical evaluation, rather than new acquaintances (Eggins & Slade, 1997).

This research study joins a small number of other pioneered social media studies thus far in providing “useful insights for those professionals seeking to find out more about social networks as a business tool, as well as for those who question the effects of little to no social cues in CMC” (Pritchett, 2011). In the Pritchett (2011) study of

perceptions and expressions of social presence, similar conclusions were made in the examination of Twitter #AgChat and #GardenChat conversations. Again, interactive dimensions were the most prominent, followed by cohesive and then affective suggesting that social media network sites, such as Twitter, provide an interactive way for people to build online communities.

Conclusions and Implications Related to Research Objective 3

This study found Rourke et al.'s assessment model for the three main dimensions to be adequate in classifying social presence in social media, such as Twitter. However, the research in this study identified two main concerns when classifying tweets within indicator categories. First, the re-tweeting feature of Twitter combined with the definitions for the assessment indicators in the areas of continuing a thread, quoting from others' messages, and referring explicitly to others' messages qualified the majority of messages to be classified in these three categories. To reduce coding overlap, improved definitions should be created to account for this feature or modification should be made to combine these three indicators into one category for social media.

Secondly, a combined 9.86% of the tweets were coded as unclassifiable in any of the established indicators within interactive and cohesive dimensions. While an "other" category was added to all dimensions prior to the start of coding, the study concluded only the affective dimension had sufficient indicators needed to complete the classification.

Unclassifiable interactive tweets were messages containing disagreements, redirected conversations, or erroneous information. Unclassifiable cohesive tweets included messages with group invites that generally were addressed to the group without

using names or pronouns but that were still contributing to the topic of conversation rather than serving a purely social function. Coding decisions also were more difficult when it came to determining how tweets should best fit the assessment model indicators in continuing a thread or quoting from other's messages. Overall challenges were observed in interpreting statements for humor, words of emotion, disagreement, and group references. In addition, Twitter conversations have an understood "you" or "us" and do not always use specific, inclusive pronouns as indicated in the Rourke et al. (2001) indicator definitions.

Finally, determining what indicator to use with statements expressing commands such as "be sure to check this out" or "tune in at this time" was also noted while coding. Modifying social media descriptors will further communication research, better define characteristics, and refine social presence models. It is important to note that the Rourke et al. (2001) assessment model was originally used for analyzing social presence in graduate-level courses rather than a specific medium such as Twitter. Thus, the difference in mediums between these two studies could have contributed to the determined inadequacies. Overall, there was value in understanding specific indicators and coder challenges in determining how to best fit them into given social media definitions and identifying the need for further refinement of the social presence model in social media.

The conclusions of this research study suggest social presence exists in Twitter environments and types of social presence dimensions describe the relationship of the conversation. Social dimensions should be utilized effectively and appropriately when engaging in computer-mediated communications to better enhance interactions.

Recommendations for Research

Recommendations for Practice

1. Social presence should be considered when selecting social media platforms to meet communication objectives.
2. When communicating using Twitter, agricultural communicators should include elements of social presence dimensions in responses.
3. Organizations should evaluate the success of communication strategies or initiatives by analyzing conversations for social presence.
4. Agricultural communications professionals should consider social interactions with consumers to enhance computer-mediated communications.

Recommendations for Future Research

1. Research should be further conducted on other areas of communicating social presence in social media.
2. Other platforms, besides Twitter, should be studied for social presence to describe differences that may exist in related findings.
3. Further research should be conducted to identify or modify social presence indicators to better fit social media.
4. The influence of moderated versus unmoderated conversations should be further analyzed to determine if social presence dimensions are affected.
5. Research should be conducted to determine types of social media platforms where cohesive and affective dimensions dominate over interactive.

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APPENDICES

APPENDIX A

MODEL AND TEMPLATE FOR ASSESSMENT OF SOCIAL PRESENCE

Appendix. A: Model and Template for Assessment of Social Presence (Rourke et al., 2001)

<i>Category</i>	<i>Indicators</i>	<i>Definitions</i>	<i>Example</i>
Affective	Expression of emotions	Conventional expressions of emotion, or unconventional expressions of emotion, includes repetitious punctuation, conspicuous capitalization, emoticons.	“I just can’t stand it when ... !!!!” “ANYBODY OUT THERE!”
	Use of humor	Teasing, cajoling, irony, understatements, sarcasm.	The banana crop in Edmonton is looking good this year
	Self-disclosure	Presents details of life outside of topic, or expresses vulnerability	“Where I work, this is what we do ...” “I just don’t understand this question”
Interactive	Continuing a thread	Using reply feature of software, rather than starting a new thread.	Software dependent, e.g., “Subject: Re” or “Branch from”
	Quoting from others’ messages	Using software features to quote others entire message or cutting and pasting selections of others’ messages.	Software dependent, e.g., “Martha writes.” Or text prefaced by less-than symbol <.
	Referring explicitly to others’ messages	Direct references to comments of others’ posts.	“In your message, you talked about Moore’s distinction between ...”
	Asking questions	Students ask questions of other students or the moderator.	“Anyone else had experience with WEBCT?”
	Complimenting, expressing appreciation	Complimenting others or contents of others’ messages.	“I really like your interpretation of the reading”
	Expressing agreement	Expressing agreement with others or content of others’ messages.	“I was thinking the same thing. You really hit the nail on the head.”
Cohesive	Vocatives	Addressing or referring to participants by name.	“I think John made a good point.” “John, what do you think?”
	Addresses or	Addresses the group as <i>we</i> , <i>us</i> ,	“Our textbook

	refers to the group using inclusive pronouns	<i>our, group.</i>	refers to ...” “I think we veered off track ...”
	Phatics, salutations	Communication that serves a purely social function; greetings, closures.	“Hi all” “That’s it for now” “We’re having the most beautiful weather here”

APPENDIX B

UNIQUE USER HASHTAGS FOUND IN #FoodD TWEETS

Table 1
 Unique User Hashtags Found in #FoodD Tweets (N=179)

Hashtag	<i>n</i>
1	5
2011harvest	1
2012Farm	1
accountability	2
adv400	1
ag	230
agcha	3
agchat	130
ageducationallaround	1
aginfo	1
AgProud	4
Agribeeff	2
agriculture	13
agvocacy	3
agvocate	11
ahmadinejad	2
allthingsorganic	1
antibiotics	16
AZ	1
beef	21
biofuels	1
biotech	4
CA	7
canorganicfarmingfeedtheworld	2
cattle	7
chef	4
chemicals	1
choices	16
client	18
corn	2
cotton	2
dairy	14
Dairymom	6
Dams	1
Davis	3
DC	4
dietitian	2
Dimock	10
doubleYEP	1

educate	1
energy	6
F8	2
Facebook	6
fail	2
familyfirst	1
farm	55
farmer	11
farmers	15
farming	1
FarmingAndTheFuture	1
farms	3
FB	13
FDA	4
feed	2
ffa	2
food	123
foodbloggers	1
foodchat	29
FoodD	3689
FoodDay	9
fooddialogues	7
FoodDMN	53
foodfact	2
foodfacts	2
foodie	5
foodmn	16
foodprocessing	1
foods	1
foodsafety	9
FSR11	3
future	1
FutureTrends	1
genetics	4
Glickman	6
GMO	25
GMOs	6
grassfed	2
GreenGridEnergy3	1
harvest2	1
health	2
Heart	1
holisticmoms	1

hungry	1
Iowa	3
itswhatsfordinner	1
JasonClay	27
jobs	2
justsayin	1
kacf	14
ketchum	2
knowyourfarmer	1
livestock	2
local	5
manureMonday	3
marketing	2
meanmom	2
meat	5
milk	5
MNAg	37
MNFOODBLOGGERS	1
mom	5
moms	4
moral	5
mpls	1
myplate	3
national	6
natural	5
NCBA	3
NDag	3
NE	1
needs	16
noaddedhormones	1
NPPC	1
nutrition	3
nutritious	1
nw	1
NYC	4
of	2
Okstate	3
opengov	1
organic	7
Permaculture	1
policy	3
politics	2
pork	11

poultry	2
profood	1
progress	3
purdue	1
QRCode	1
rancher	4
ranchers	3
ranchlife	5
rdchat	3
realfood	1
refreshrefreshrefresh	1
restaurants	1
rocking	1
Ronald	2
Roundup	1
ruralbroadband	2
ruralbroadband	1
ruralinternet	1
sahm	4
sauce	1
school	1
security	6
shame	4
slowrural	1
soybean	1
Stallman	30
stopmonsanto	1
Stott	2
Stuart	1
sustainability	1
Sustainable	22
TastyThur	1
Tcot	1
technology	2
thankafarmer	4
thegraduate	2
themoreyouknow	2
TotallyNOTSustainable	1
trade	3
transparency	2
twitter	4
UCDavis	1
ugh	2

UofM	1
USDA	8
USFRA	21
VanAlfen	7
Vilsack	39
wahm	4
water	7
welfare	4
Win	3
world	2
WPPC2012	1

VITA

Shantell LaDawn Schweer

Candidate for the Degree of

Master of Science

Thesis: THE FOOD DIALOGUES: ANALYZING SOCIAL PRESENCE IN #FoodD
TWEETS

Major Field: Agricultural Communications

Biographical:

Education:

Completed the requirements for the Master of Science in Agricultural Communications at Oklahoma State University, Stillwater, Oklahoma in December, 2011.

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Employed by Harvey County Farm Bureau Association of Kansas as the Director, 2005-2007. Employed by Winfield Public School as the Public Information Officer, 2001-2004. Employed by Arkansas City Convention & Visitors Bureau as the Director, 1999-2001. Employed by First Intermark as the Public Relations Director, 1998-1999. Employed by Cowley County Community College as an Adjunct Professor, 1996-2000.

Professional Memberships: N/A

Name: Shantell LaDawn Schweer

Date of Degree: December, 2011

Institution: Oklahoma State University

Location: OKC or Stillwater, Oklahoma

Title of Study: THE FOOD DIALOGUES: ANALYZING SOCIAL PRESENCE IN
#FoodD TWEETS

Pages in Study: 55

Candidate for the Degree of Master of Science

Major Field: Agricultural Communications

Scope and Method of Study: The scope of this study was Twitter #FoodD tweets occurring in a specific time around The Food Dialogues live webcast event on September 22, 2011. A collection of tweets were archived and examined for social presence dimensions and indicators through content analysis.

Findings and Conclusions: The study used the Rourke et al. (2001) assessment model of social presence to determine social presence. The study revealed that social presence was an important part of the #FoodD tweets and most of the tweets were interactive. The study also concluded social presence dimension categories are adequate, but social presence indicators should be refined for future social media studies.

ADVISER'S APPROVAL: Dr. Dwayne Cartmell, II
