

**First Year Student Perceptions and Effectiveness of Social Media Influence in College of
Agriculture Retention Efforts in Southeastern Land-Grant Universities**

by

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Abstract

With young adults leading the way in social media usage, it has not gone unnoticed by Colleges of Agriculture administrators who want to connect with students where they are. This generation is more wired than any generation before according to researchers Barnes and Jacobsen (2013). Researchers suggest administrators must be creative to connect with a generation that is generally not persuaded by unsupported marketing approaches (Paterson, 2019). Academic institutions need tools to gather evidence on what social media platforms are most used, which types of posts are most popular, and what perceptions students have of the connection to the college due to social media.

The purpose of this study was to determine first-year and first-year transfer student perceptions and effectiveness of social media influence in Southeastern Land-Grant Universities Colleges of Agriculture. The intent was to describe College of Agriculture first-year and first-year transfer student perceptions in of their College of Agriculture's social media platforms as communication, retention, and occupational resource knowledge. Existing research offers little guidance on incorporating social media into marketing strategies within Colleges of Agriculture. Results from this study can be used for creating and revising social media practices as well as justifying resources being allocated to those efforts.

Participants of this study were College of Agriculture first-year or first-year transfer majors enrolled in a public Southeastern Land-Grant University. The research objectives of this study were: (1) Identify personal and academic characteristics of the target population, (2) Identify social media platforms and other communication channels of the Colleges of Agriculture used by student, (3) Describe the effectiveness of social media on student communication, retention, and occupational resources within the College of Agriculture. This descriptive study

utilized a quantitative non-experimental survey research design. The data was analyzed and reported using the statistical methods means, standard deviations, frequencies, percentages, Pearson product-moment correlation, and independent t-tests.

The findings of this study indicate that Colleges of Agriculture are expected by their students to have a presence on social media but Colleges of Agriculture do not currently have a significant presence on the platforms they most often use. It was found that digital communication methods are preferred channels of communication for respondents. Substantial, significant correlations existed between students finding content relevant in order for engagement and connectedness to occur with the social media of Colleges of Agriculture.

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CHAPTER I: INTRODUCTION

Young adults rank higher in social media usage than any other age group with 88 percent of 18 to 29 year-olds indicating they use some form of social media (Smith & Anderson, 2018). Social media usage in young adults has not gone unnoticed by University Colleges of Agriculture. Administrators want to meet students where they are by increasingly making use of social media to connect with a generation that is more wired than any generation before (Barnes & Jacobsen, 2013). To reach this wired generation, institutions have adapted their marketing strategy to include social media as a tool to reach potential and current students as student recruitment and retention is a critical concern within Colleges of Agriculture (Rayfield et al., 2013).

According to Rayfield et al. (2013), only minimal research has addressed the recruitment and retention of post-secondary students majoring in an agricultural field of study. Existing research involving student recruitment and retention indicates reaching this generation of future workers should be uniquely targeted and designed strategically for them individually (Baker et al., 2013). Researchers Baker et al. (2013), found Generation Z considers themselves as unique individuals and respond more positively to marketing efforts specifically tailored to them individually. According to Fry & Parker (2018) Generation Z is the most educated, racially, and ethnically diverse generation thus far. Because of this, Colleges of Agriculture should also consider recruitment and retention efforts to reach their target audience. Rayfield et al. (2013) describes the target audience as “an increasingly diverse and non-agricultural pool of potential students” (p. 92). Paterson (2019) suggested college administrators must think outside the box to connect with a generation that is not apt to be persuaded by unsupported marketing tactics. Institutions need instruments to collect data on what social media platforms are most used, which

types of posts are most effective, and what perceptions students have of the image that is being created of the college on social media.

Adopting new technologies and changing marketing tools is essential to recruit and retain a workforce that will fill the estimated 57,900 agricultural job openings annually (Goecker et al., 2015). According to Goecker et al. (2015), it is expected that 39 percent of those jobs will be filled by graduates from related fields of study. Baker et al. (2013) reports, enrollment in Colleges of Agriculture are not meeting the need of the agricultural industry, leaving Colleges of Agriculture struggling to provide qualified graduates to fill positions in the agriculture, food, and environmental sectors. This shortage in qualified agricultural graduates is leaving many positions unfilled or those positions being filled by graduates from related areas of study (Baker et al., 2013).

To better understand why agriculture is experiencing this shortage of qualified workers, an examination of the underlying factors influencing career choice decisions being made by students preparing to enter the workforce should be considered. According to the Journal of College Admission, students are looking at future jobs more closely in terms of job patterns, business needs, and earning potential (Paterson, 2019). Researchers Rayfield et al. (2013) reported in order to increase the number of students pursuing agricultural careers students “must be made aware of opportunities within the field of agriculture” (p. 92). Colleges of Agriculture should be intentional placing information such as career opportunities where and when students are looking for possible future careers. Information on career opportunities is important to students as they are seeking career information “more intently at future careers in regard to employment trends, industry needs, and earning potential” as reported by Paterson (2019, p. 30). Social media provides an effective channel for Colleges of Agriculture to reach students with

information they desire as they are making college and career decisions. Mangold and Faulds (2009) reported social media “enables instantaneous, real-time communications and utilities multimedia formats (audio and visual presentations), and numerous delivery platforms (Facebook, YouTube, and blogs, to name a few), with global reach capabilities” (p. 359).

Historically, research concerning factors of student enrollment decisions that have focused on influences such as exposure to agriculture, family and friends, recruitment, professionals, and job considerations (Rayfield et al., 2013; Rocca, 2013; Thieman et al., 2016). Researchers Baker et al. (2013), Esters et al. (2005), Rayfield et al. (2013), Rocca (2013), Thieman et al. (2016) concluded that parents are an influencing factor on college and career choice.

Other influence factors identified from research studies include community involvement with youth organizations, influential adults such as advisors, or teachers and exposure to agriculture to be common influential factors on career choice (Adedokun et al., 2008; Baker et al., 2013; Rayfield et al., 2013, Rocca, 2013; Thieman et al., 2016; Wildman & Torres, 2001). The influence of social media has not been addressed in previous research studies. As the use of social media has increased, its influence on college and career choice has integrated with traditional factors of influence and necessitates the need to be taken into consideration as a factor of influence (Rayfield et al., 2013). This study seeks to give Colleges of Agriculture an instrument to define the student perceptions and effectiveness of social media influence and retention efforts of Colleges of Agriculture.

Students’ interaction and use of technology in day-to-day life show technology as one of the preferred channels of communication, according to Rayfield et al. (2013). Generation Z is 25

percent more likely to say they are addicted to their digital devices than millennials (Paterson, 2019). Researchers Beattie et al. (2019) state, “Today, communication is widely dependent upon social media as a vehicle to disperse information in a timely, efficient, and cost-effective manner” (p. 204). The influence of apps, websites, and social media such as Twitter, Facebook, Snapchat, and Instagram must be taken into consideration as viable influences on the college and career decisions of today’s students. The future workforce is looking for practical degrees where careers are plentiful (Paterson, 2019). Baker et al. (2013) recommends that students recognize their own career interests and distinguish the options available to them, as it is a significant component of the career decision-making process. Colleges of Agriculture can use this information combined with their presence on social media platforms to raise awareness of agricultural careers and motivate student college and career choice decisions toward professions within the field of agriculture.

Statement of the Problem

Colleges of Agriculture are using multiple channels of social media to communicate with current and prospective students without knowing its effectiveness. Time, effort, and funding are allocated to their College’s presence on social media. To validate these marketing efforts, Colleges of Agriculture must be able to evaluate if their social media presence is effectively reaching their students. Little guidance is found through academic literature on how to effectively incorporate social media into a capable recruiting and retention tool (Mangold & Faulds, 2009). Using this study, administrators can create or revise social media practices, while rationalizing their use of resources. The majority of students are coming from non-agricultural backgrounds with increased diversity; it is now a necessity that Colleges of Agriculture place marketing efforts where they can reach their current and potential students (Rayfield et al.,

2013). Generation Z is the first to have had internet as a constant in their lives whether through broadband or cellular service (Barnes & Jacobsen, 2013). To reach this wired generation and future workforce, Colleges of Agriculture must place their efforts where the students are. With 88 percent of 18 to 29 year olds indicating they use some form of social media according to Smith and Anderson (2018) Colleges of Agriculture are allocating an increasing amount of communication and marketing efforts there (Barnes & Lescault, 2011).

Purpose of the Study

The purpose of this study are to determine first-year student perceptions and effectiveness of social media influence in Southeastern Land-Grant Universities Colleges of Agriculture communication, retention, and occupational resources knowledge efforts. Using a descriptive correlational design, this study will describe first-year students and first-year transfer students, within a College of Agriculture, addressing their University College of Agriculture’s Social Media Platforms such as Facebook, Twitter, Instagram, Snapchat, YouTube, Flickr, LinkedIn, and Pinterest as communication, retention, and occupational resources. This research study aligns closely with research priority three of the American Association for Agricultural Education’s (AAAE) research area, question fifteen: “what methods, models, and practices are effective in recruiting agricultural leadership, education and communication practitioners, and supporting their success at all stages of their careers” (Roberts et al., 2016, p. 31).

Assumptions

The following assumptions were made regarding this study:

1. The survey instrument to be used will prompt truthful and accurate responses from participants.
2. Statements in the survey will be fully understood by participants.

3. Students' characteristics are equivalent across Colleges of Agriculture within this study.
4. Colleges of Agriculture within this study have similar social media practices on similar platforms.
5. Students are using social media platforms even though a minimal amount of their social media activity involves their college.

Limitations

The following are limitations of this study.

1. Non-response error could limit the study by negatively affecting the internal validity of the survey.
2. The study was limited to individuals identified as a first-year or first-year transfer College of Agriculture students. Many students change their major into the College after their first year. This study will be confined to students' initial selection of an academic major and will not account for student retention or changing of college majors.
3. This study was limited to Southeastern Public Land-Grant Universities. Not all Colleges of Agriculture within the Southeast participated and other Colleges of Agriculture were not considered, as they are not a public land-grant University.
4. Caution should be utilized in the interpretation of results and generalization to other populations of students should not occur.
5. There may be unknown conditions or issues at the post-secondary programs selected that could affect the data collected.

Scope and Population

The scope of this study will include first-year and first-year transfer post-secondary students enrolled in public land-grant southeastern Colleges of Agriculture. The population of

this study will consist of first-year or first-year transfer students during the 2019-2020 academic school year, enrolled in a public land-grant southeastern university, and identify as a College of Agriculture major.

Objectives of the Study

1. Identify personal and academic characteristics of the target population.
2. Identify social media platforms and other communication channels of the Colleges of Agriculture used by students.
3. Describe the effectiveness of social media on student communication, retention, and occupational resources within the College of Agriculture.

Theoretical Framework

Recognizing and understanding why individuals use certain media content is necessary for Colleges of Agriculture to effectively use social media as a recruitment and communication tool to reach students. The theoretical framework for this study was based on the uses and gratification theory. The uses and gratification theory is an approach to understanding how and why people actively seek out specific media to satisfy specific needs. Uses and gratification theory according to Qyan-Haase & Young (2010) was created to examine traditional forms of media but with the advent of social media this theoretical framework has also been applied to this form of media as well. The theory characterized the audience as active, perceptive, and interested in what media they chose to consume. The foundations of the uses and gratification theory indicates that individuals would actively choose and use certain media in a certain way in response to satisfy a specific need. Further employing the uses and gratification theory in research, Ko (2000) reported that users actively seek out media to best fulfill their needs.

Early uses and gratification theory researchers classified needs into five groups (Katz, et al., 1973):

1. Cognitive needs - acquiring of information, knowledge and understanding;
2. Affective needs - supporting aesthetic, pleasurable, and emotional experience;
3. Integrative needs - strengthen credibility, confidence, stability, and status (combines both cognitive and affective elements);
4. Personal integrative needs - reinforcing contact with family, friends, and the world;
5. Tension release needs - creating an escape and diversion.

Media does not create these societal and emotional needs previously listed, but rather seeks to help satisfy said needs (Katz et al., 1973). Researchers stated, “the surprising thing is to realize the extent and range of the media’s encroachment on the ‘older’ ways of satisfying social and psychological needs” (Katz et al., 1973, p. 180). It would seem that early communications research studying which kinds of media and content would attract and hold the audience’s attention was successful based on their research (Katz et al., 1973). Media was used in three ways, according to Katz et al. (1973), to strengthen, to weaken, or to acquire.

Definition of Terms

The following terms are used throughout this paper and warrant specific definition.

American Association for Agricultural Education (AAAE): The AAAE is a professional society for graduate students and university faculty with an interest in agricultural communication, education, extension, and leadership. These agriculturalists work together on research topics relating to food, agriculture, and natural resources as well as connect the general public to scientists solving agricultural problems (Roberts et al., 2016).

AAAE National Research Agenda: The AAAE decided to create the AAAE National Research Agenda, which identifies 25 priority research questions that are further categorized into seven research priority areas. The AAAE National Research Agenda helps to guide researchers in choosing their research topics in order to contribute to the most urgent research needs of the agricultural community stakeholders (Roberts et al., 2016).

Brand: is a particular type or way of doing something (Cambridge Dictionary, n.d.).

Bitmoji: is a brand name for a digital cartoon image that is intended to look like and characterize the user (Cambridge Dictionary, n.d.). They are also called an avatar.

Direct Message: It is a message you send privately and is not posted for everyone on social media to view (Cambridge Dictionary, n.d.). It is similar to sending an email but it is within the social media platform.

Facebook: is an online platform whose mission is to “give people the power to build community and bring the world closer together.” (Facebook, n.d.). Over one billion messages are shared on Facebook each day; “helping people stay close even when they are far apart.” (Facebook, n.d.). People can send messages, post status updates to keep up with friends, family, businesses and communities. Content is passed through photos, words, and links.

Filters: are an overlay of accessories and/or special effects onto an image (Cambridge Dictionary, n.d.). People use filters to transform their selfies.

Generation Z: Individuals born between 1997 and 2012 are considered to be Generation Z, also referred to post-millennials or Gen Z (Fry & Parker, 2018).

Hashtag: A user-generated word or phrase that follows a pound sign. It is a type of metadata used to identify specific posts across multiple social media platforms such as Facebook, Twitter,

and Instagram (Barbee, 2018). It is a form of tagging so that users can tag their content and link to similar content that has the same hashtag.

Instagram: is a social media app created to share photos and videos. Moreau describes it as a simplified Facebook (n.d.). It has a profile and news feed similar to Facebook and Twitter. Users can interact with others by following other users, being followed, commenting, liking, tagging, and private messaging (Moreau, 2020).

Like: This refers to a click that gives a thumbs up to a post that reflects your acknowledgment of the post (Patel, 2015).

Microblogging: Merriam-Webster (n.d.) defines microblogging as blogging done with severe space or size constraints typically by posting frequent brief messages about personal activities.

Millennial Generation: Individuals born between 1981 and 1996 are considered a Millennial. Defining generational cutoff points is not an exact science and should be viewed as a tool to use for analyses (Dimock, 2019).

Newsfeed: A web page or screen, which frequently changes or updates to show the most recent news or information (Cambridge Dictionary, n.d.).

Pinterest: a visual discovery platform to assist in discovering anything from recipes, style, inspiration, etc. (Pinterest, n.d.).

Pin: Pins are ideas that people on Pinterest create, find, and save from around the web. You can click on a Pin to be linked to the website from which the pin came. If you like a pin you can save it onto your board to keep your ideas organized and easy to find (Pinterest, n.d.).

Post: something (such as a message) that is published online (Merriam-Webster, n.d.).

Retweet: a short piece of information or comment circulated on Twitter and recirculated on your account (Cambridge Dictionary, n.d.).

Share: “to put something on a social media website so that other people can see it, or to let other people see something that someone else has put on a website” (Cambridge Dictionary, n.d.).

Social Media: web-based sites that allow users to interact with one another through sharing and consuming content such as images, text, videos, and links. Popular social media platforms are Facebook, Twitter, Instagram, Snapchat, and many others (Nations, 2020).

Snapchat: a social media platform that serves to send pictures, messages, and videos that are only accessible to be seen for a limited amount of time (Cambridge Dictionary, n.d.)

Twitter: an online news and social networking site where people communicate by sending short messages called tweets. Anyone who follows you can see your tweet. Twitter is also used for what some call microblogging (Gil, 2020).

Viral: describes how quickly something becomes popular by being published, shared, or liked on the internet or sent from person to person digitally (Cambridge Dictionary, n.d.)

Vlog: a short film posted on the internet that records your thoughts, ideas, or opinions on a subject (Cambridge Dictionary, n.d.).

Vlogger: someone who makes vlogs or known as a video blogger (Cambridge Dictionary, n.d.).

YouTube: Established in 2005, YouTube is a video sharing site where users can watch, like, share, comment, and upload their videos themselves (YouTube, n.d.).

CHAPTER II: LITERATURE REVIEW

Introduction

The purpose of this chapter is to explore and summarize existing information and published research that is of significance to this study. This literature review was divided into the following sections: social media, social media platforms, Colleges of Agriculture use of social media, Colleges of Agriculture marketing strategies, Colleges of Agriculture social media presence, uses and gratifications theory, and future of investment.

Social Media

The Merriam-Webster dictionary (n.d) defines social media as “forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content.” Social media has interjected itself into numerous areas of our lives as it has become a daily practice for many individuals and has become essential to Generation Z. Social media is continually linking people, organizations, ideas, media, technologies, and schools together. Creating a virtual culture of connectivity.

Social media began with the invention of the World Wide Web in 1991 by Tim Berners-Lee when he connected hypertext technology to the Internet (Dijck, 2013). Online communities began to form through list-servers and e-mails but the internet did not automatically connect you with other people (Dijck, 2013). Internet activity supported communities but did not build communities. The internet was not set up in a way to make new online connections but rather to strengthen those connections already existing. It was not until Web 2.0 was introduced in 2000 that the internet became interactive and shifted into what Dijck (2013) reported to be “socially realized structures of communication” (p. 5). Social networking sites began to materialize

making interaction easy among people sharing common interests (Edosomwan et al., 2011).

After creating an account on a social network site, users are encouraged to identify others they know within the site to add as friends, contact, or fan (Boyd & Ellison, 2007). Social media's public exhibition of connections among people is a crucial element of its success. Soon, social networking sites like Facebook in 2004 and YouTube in 2005 emerged (Edosomwan et al., 2011).

Users were no longer solely reading the material they were given, but could now contribute their own content referred to as user-generated content. Researchers Mandgold and Faulds (2009) reported, "The emergence of Internet-based social media has made it possible for one person to communicate with hundreds or even thousands of other people" (p. 357).

Participation and engagement within the internet expanded as users could create, communicate, and express themselves through their own content creation. This content can be divided into categories with examples given for each category (Safko, 2012): social networking sites (Facebook), photo sharing (Instagram, Snapchat, Pinterest), audio and video (YouTube), microblogging (Twitter), live casting (Facebook Live), virtual worlds (Second Life), gaming (World of Warcraft), really simple syndication aggregators (Google Reader), search engines (Google), mobile (cellphones, laptops), and interpersonal.

Colleges of Agriculture will not use all of these categories when targeting their student population, as the categories are all not applicable to their efforts in reaching their students. However, it is worth mentioning as the breadth of what is accessible via social media is vast. An understanding of the internet's reach and capabilities is important especially as these technologies are ever evolving.

Social Media Platforms

For this study, we contextually define social media platforms as reported by Boyd and Ellison (2007) as: (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection and (3) view and traverse their list of connections and those made by others within the system.

Facebook

Facebook is the most widely used online social media platform (Perrin & Anderson, 2019). According to researchers from the University of Massachusetts it is the most prevalent social media platform used by universities with a 98 percent participation rate (Kessler, 2011). Facebook has the broadest reach of all social media sites because it grasps prospective students, parents, current students, and alumni whereas other social media platforms have a much narrower reach among audiences (Kessler, 2011). Facebook's (2020) mission is to "give people the power to build community and bring the world closer together" ("Who We Are" section). Mark Zuckerberg first launched Facebook in February of 2004.

Facebook was initially used to link Harvard student users together, then later extended to include other college's students, then high school student users, and eventually everyone over the age of 12 (Edosomwan et al., 2011). Content on this platform is passed through photos, words, messages, videos, and links. People can friend one another, view users personal profiles, comment, "like," and post updates to connect with friends, family, businesses, and communities. Users scroll through their newsfeed to view posts from others within their friend list. Facebook (2020) articulates they are "helping people stay close even when they are far apart" ("Who We Are" section).

Common interest groups such as schools, workplaces, colleges, clubs, and characteristics are all ways Facebook users connect. Organizations can create Facebook accounts giving them their own page to promote their mission and update followers on upcoming events. Typically, Universities have a main Facebook page with different colleges within the university having their own separate pages. Organizations and clubs within colleges also often have their own pages that specifically cater to those certain groups. It is important for Colleges of Agriculture to have a presence here as this is one the places students look when making their college choice. Social media is used by two out of five prospective students when they are determining which college they will attend (Turner, 2017).

Facebook continues to be one of the most commonly used social media platforms in the United States. According to a Perrin and Anderson's Pew Research survey in 2019 it is the most frequently visited social media site by adults (2019). Researchers Perrin and Anderson (2019) also conclude that, 76 percent of ages 18 to 24 year old individuals conclude they have used Facebook and approximately 69 percent have used the site. Their research shows, 74 percent of those Facebook users visit the site daily and over half of all Facebook users access the site several times a day according to Pew Research (Perrin & Anderson, 2019).

Twitter

Twitter is an online news and social networking site where people communicate by sending short messages called tweets. Twitter is also used for "microblogging" as tweets are limited in characters (Gil, 2020). Users can share their thoughts and ideas with a vast audience. It allows users to curate what content they desire to see based on their interests be it news, events, people, companies, or friends.

Twitter is used by marketers to create and increase brand awareness within their audience (Baker, 2020). Shout-outs and quick advertisement content help to grow and connect with your followers. If users like a tweet, they can retweet it (which is sharing the tweet on your own page), comment, mail it through direct message, or “like” it. Institutions can pay for tweets to be placed on the Twitter feeds of users, even those who are not followers of their account. Twitter is used by 44 percent of adults between the ages of 18 to 24 (Perrin & Anderson, 2019). According to Pew Research Center data, adults visit Twitter less often during the day than they visit YouTube, Snapchat, Instagram, or Facebook. The research of Perrin & Anderson (2019) show Twitter is also the least popular social media site of those listed above.

Instagram

Instagram is a photo and video sharing platform used for sharing with “followers” or a select group of friends by viewing, commenting, and liking posts. Instagram was launched in October of 2010 and landed over 25,000 users on that very day (Blystone, 2019). Instagram prides itself on being an easy to use interface. Even with Facebook purchasing Instagram in 2012, it has maintained the simple and intuitive user experience its core focus (Blystone, 2019). Instagram has a feed just as Facebook and Twitter. Upon launching, photos of those accounts you follow begin to show in your feed. You can heart (which is similar to liking), comment, and send posts to other users within Instagram.

Instagram and Snapchat, which will be discussed next, have a younger clientele than the other social media platforms discussed here. According to researchers, 67 percent of Instagram users and 62 percent of Snapchat users are between the ages of 18 to 29 (Perrin & Anderson, 2019). There is a surprising difference of use among ages within the young adult population. Ages 18 to 24 say they are substantially more likely to use Instagram at 75 percent versus 47

percent of adults ages 25 to 29 (Perrin & Anderson, 2019). Perrin and Anderson (2019) found 67 percent of Instagram users ages 18 to 29 visit the site daily and 60 percent those say they visit it several times a day. The ages 18 to 24 are of particular interest to colleges as that is predominately the age of their target audience, potential recruits, and first year students (Clinedinst & Koranteng, 2017).

Snapchat

Snapchat, founded in 2011, was intended to embrace a more natural flow of interaction than other social media platforms (Elliot, 2019). It is a free social media outlet for users to send in the moment pictures, videos, drawings, and messages. Users can “snap” friends by sending them a photo or video that will only display for 10 seconds and then the content is deleted. A feature users like is messages disappear after only a few seconds, similar to real life interactions with others (Elliot, 2019). Content posted on users Snapchat profiles are accessible for 24 hours. Snaps are deleted within ten seconds and posted profile content is only available for 24 hours resulting in users feeling compelled to use the site frequently for a fear of missing out (Bouse, 2016). Although the content is temporary, users can save images by screenshot.

Many users enjoy the photo filters and voice changing capabilities to enhance their photos and videos through Snapchat. Users can even create a personal mini-me that is called a bitmoji. Institutions can create accounts to interact with students through their Snapchat stories. Filters featuring the University’s colors and mascots can help engage users furthering the brand of the college.

Researchers Perrin and Anderson (2019) noted research showed that 73 percent of young adults ages 18 to 24 are using Snapchat. Snapchat users are utilizing the platform consistently. Approximately eight-in-ten (77%) of Snapchat users ages 18 to 29 say they are using the app

every day, including 68 percent who say they are using it several times a day (Perrin & Anderson, 2019).

YouTube

Established in 2005, YouTube is a video sharing site where users can watch, like, share, comment, and upload their videos themselves. Accessible on PCs, laptops, tablets, or smartphones, YouTube has the highest percentage of adults using the platform at 73 percent and 90 percent of ages 18 to 24 years using this media according to Pew Research data (Perrin & Anderson, 2019). Young adults use YouTube to watch music videos, comedy shows, how-to guides, recipes, hacks, subscribe to other YouTubers, and follow vloggers which are video bloggers (YouTube, 2020). Colleges have YouTube channels highlighting campus tours, student spotlights, behind the scene tours, hype videos, anything to get and retain students' attention.

Users can subscribe to a YouTube channel and are notified when new content is added to a subscribed channel. YouTube videos can be posted across a college's social media. A video can be uploaded on YouTube, then posted and shared on Facebook and Instagram through a web link to the YouTube video. Being able to cross share across multiple social media platforms allows colleges to reach many students easily and making their virtual contacts seem more personal and targeted. This is a feature Generation Z responds to favorably, as they frequently have several active social media accounts.

Flicker, LinkedIn, and Pinterest

The five aforementioned social media sites are the major platforms used by institutions' target audiences and thus the sites in which they primarily focus their marketing energy. However, institutions also often have accounts on the platforms Flickr, LinkedIn, and Pinterest. Flickr is an online photo management and sharing application. Uploaded photos can be

organized into collections, viewed, and commented on by others. LinkedIn is similar to other social networking sites but places a professional slant on content as it is designed to help people make business connections, share experiences, accomplishments, and find jobs (Johnson, 2019). Pinterest, is comparable to an online bulletin board where you can organize content. Pinterest enables users to share and discover new interests by ‘pinning’ images to their board and browsing what others have pinned. Pins can be compiled on separate boards making a collection of ‘pins’ with a common theme.

Colleges of Agriculture Use of Social Media

Researchers Barnes and Lescault (2013) consider college freshman as always connected due to mobile devices allowing multi-tasking and a nearly constant communication flow. Paterson (2019) reported “A full 40 percent of Gen Z are self-identified digital device addicts” (p. 30). Digital devices are affording individuals access to music, making phone calls, researching the internet, checking in on social media, emailing, gaming, streaming videos, and a multitude of other activities all from a single mobile device.

So much is vying for students’ attention, colleges are left to question according to Barnes & Mattson (2010) “How can a university reach the eyes and ears of an audience that is largely responsible for over one billion text messages sent per day in the United States?” (p. 1). To address this, college admissions offices have had to change the way they recruit and retain students. Capturing the attention of what many researchers consider a wired, constantly connected and instant gratification generation has become the ever-changing target for college admission offices (Barnes & Mattson, 2010; Barnes & Lescault, 2013). Social media has become a marketing tool to attract and retain students by meeting them where they are. Researchers

Barnes and Mattson (2010) reported that in order to optimize their effectiveness, colleges need to know the details of the online environment and user preferences.

Researchers from the University of Massachusetts Dartmouth Center for Marketing Research found that 100 percent of US colleges and universities use at least one form of social media (Barnes & Lescault, 2011). Placing a link to the college's social media account on the homepage allows users to quickly access the college's social media accounts and follow them. This forms a direct line of virtual communication between institution and student. As users begin to like, share, and/or hashtag posts about their institution for their own followers to see, it yields free publicity for their college. When students begin their college search, they often look to websites to gather information. While refining their list of potential campuses, students turn to social media for a clearer picture of what the campus and its students are like (Turner, 2017). It can be an important marketing tool to place easy access directly in view of potential students looking for information about their college.

Different Colleges of Agriculture focus their marketing efforts towards various social media platforms, which can often be seen on their website homepage. Auburn University (AU), Clemson University (CU), Louisiana State University (LSU), University of Florida (UF), and University of Georgia (UGA) all boast social media logos on the home pages of each of their respected institutions. Within the context of this study participating universities will be identified by their respected abbreviations. When looking at the Colleges of Agriculture surveyed in this study, all but CU's College of Agriculture, Forestry and Life Sciences (CU/CAFLS) have social media logos on their website homepage. Facebook and Instagram are present on all the college homepages, with the exception of CU/CAFLS. Links to YouTube and Twitter can be found on the homepages of: AU College of Agriculture (AU/COA), UGA College of Agriculture and

Environmental Sciences (UGA/CAES) and LSU College of Agriculture (LSU/COA). AU/COA and UGA/CAES homepages both show LinkedIn. Flickr is present only on UGA/CAES’s homepage, while AU/COA is the single college to display Snapchat. No matter if colleges are displaying their social media account links on their website’s homepage or not, all colleges have an active role in using social media to promote their college.

Table 1

Social media platforms present on College of Agriculture’s Homepages

AU/COA	FB	IG	YT	T	LI	SC	
UGA/CAES	FB	IG	YT	T	LI		F
LSU/COA	FB	IG	YT	T			
UF/CALS	FB	IG					
CU/CAFLS							

Note. Facebook (FB), Instagram (IG), YouTube (YT), Twitter (T), LinkedIn (LI), Snapchat (SC), and Flickr (F).

Where Students are on Social Media

The National Research Center for College and University Admissions (NRCCUA) reported ten years ago that an estimated 61 percent of university admissions offices used social media to recruit prospective students (Turner, 2017). The 2017 Social Admissions Report shows 63 percent of students researching the college they are interested in using social media (Turner, 2017). Social media at that time was becoming necessary as a marketing tool and has since become essential. As previously mentioned, donning nearly every college’s main page are the social media platforms they use. This allows users to follow their college and begin building a digital relationship even before students set foot on campus. Using online social media tools to connect with students does not stop once they have reached campus. Colleges then use those same platforms to continue to build that relationship through multiple social media channels. Users are not focused on a single form of social media but trends show users are employing a

range of communication tools making colleges cast a wide net over social network sites (Quan-Haase & Young, 2010).

With competition fierce among colleges in terms of recruiting students, universities work hard to create a feeling of connectedness with their students by strengthening the bond between student and college. The stronger that bond, the more likely that students will share about their college on their personal social media sites thus promoting the college's image. Rather than influencing a limited number of acquaintances, individuals can go viral overnight (Mangold & Faulds, 2009). Colleges must consider how to harness the powerful conversations and publicity to positively benefit their programs.

College admission offices would benefit from understanding which social media platforms students are using more frequently and if users are following their college's accounts on said platforms. Turner (2017) reported, "Facebook is typically a way to connect with parents, since its users skew older. Twitter is primarily how admission officers connect with each other, and Instagram and Snapchat are almost exclusively student-focused" (p. 32). With students using multiple social media channels across differing devices, colleges must post information across multiple social media channels giving administrators increased opportunities to reach students through their preferred platform.

Pew researchers Smith and Anderson (2018) found that younger Americans, mostly 18 to 24 year olds, are using a variety of platforms frequently. Facebook and YouTube were the primary platforms of most adults within the United States, while at usage by age group tends to change. Snapchat, Instagram, and Twitter are more likely to be used by young adults ages 18 to 24 (Smith & Anderson, 2018). Facebook appeals to a wide range of demographic groups while other platforms seem to target certain subsets of the population (Smith & Anderson, 2018).

Young adults, 18 to 24 year olds, are also visiting social media sites daily or even multiple times a day. When comparing the social media sites Facebook, Instagram, Snapchat, YouTube, and Twitter many users visit the sites at different frequencies. The majority of Facebook, Snapchat, and Instagram users visit the sites at least once or multiple times per day (Perrin & Anderson, 2019). YouTube and Twitter are visited less often.

Social media platforms and their popularity levels change as new outlets emerge and generations grow older. Colleges must be able to hit that moving target by adapting and changing as their demographics and media channels evolve. Turner (2017) reported, colleges should persistently analyze and adapt the way media channels are used and incorporate its strengths into their marketing plans. Using Snapchat as an example, Turner (2017) described it as mainly a network for young people to connect with one another when it first began. Their communications department did not believe it would be successful as a marketing tool for their college to adopt. When Snapchat continued to grow in popularity with their target population, they decided to re-evaluate it as a viable marketing tool. After a successful pilot at their college, they concluded that Snapchat would be a successful social media marketing avenue (Turner, 2017). With new social media sites, surfacing at an increased frequency this will become a common practice among colleges as they seek out which avenues and platforms to best connect to their students.

College of Agriculture Marketing Strategies

Colleges of Agriculture Connect with Students on Social Media

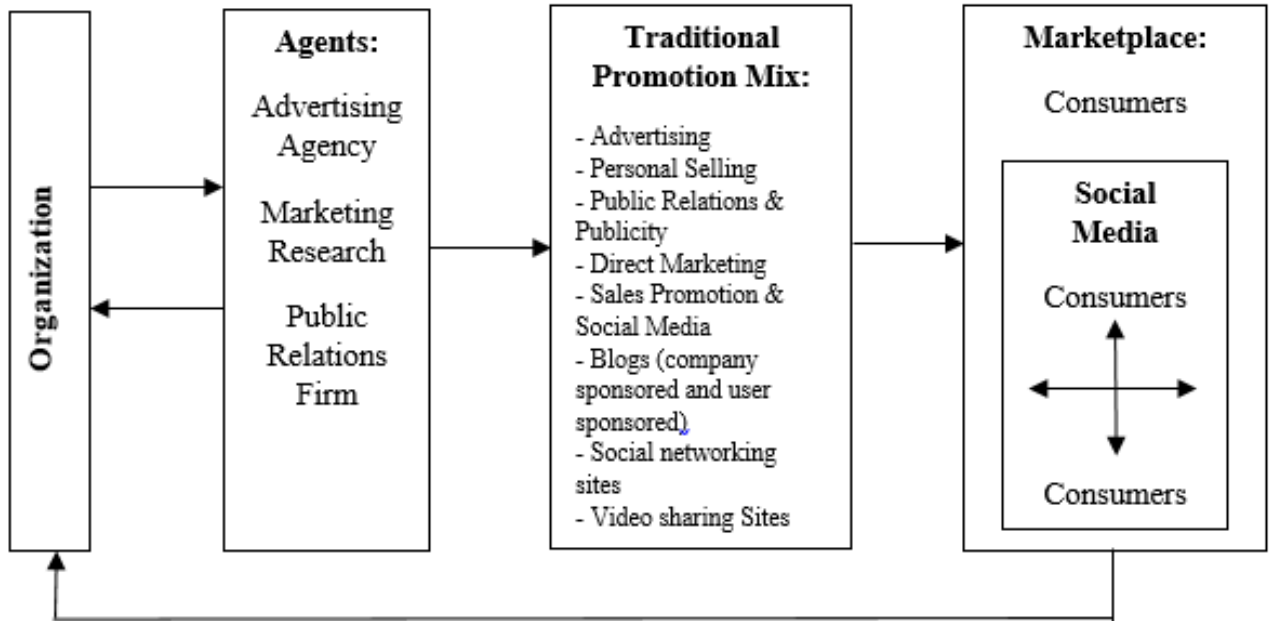
Not only do colleges need to understand what platforms students are using, they also need to understand how they are using said platforms. Social media facilitates instantaneous, real-time messages across different channels distributing to multiple platforms with a worldwide reach (Mangold & Faulds, 2009). Colleges can influence student conversations with one another

in a way to promote the college (Mangold & Faulds, 2009). Researchers Mangold and Faulds (2009) report “Instead of telling a few friends, consumers now have the ability to tell hundreds or thousands of other people with a few keystrokes!” (p. 359). Learning to harness this marketing potential is significant for colleges to reach more of their students.

Integrated marketing communication (IMC) attempts to coordinate and control the various elements of the promotional mix. With IMC’s roots being traced back to the 1970s, IMC is the idea and method of managing, over time, audience-focused, channel-centric, and result-driven brand communication programs (Kitchen & Burgmann, 2010). The advent of consumer-generated media, better known as social media, has tremendously transformed the marketing tools and strategies used for communication with target audiences (Mangold & Faulds, 2009). Researchers Blackshaw and Nazzaro (2004) describe social media as “a variety of new sources of online information that is created, initiated, circulated, and used by consumers with the intent of educating one another about products, brands, services, personalities, and issues” (p. 2).

Figure 1

The New Communications Paradigm



Source: (Mangold & Faulds, 2009)

Trends have severely weakened the usefulness and practicality of traditional marketing strategies (Mangold & Faulds, 2009). Traditional sources of advertising such as radio, television, magazines, and newspapers are no longer consumers' choice for sources of information. As noted by researchers Mangold and Faulds (2009), consumers want the information they desire immediately and on-demand. Consumers turn to different types of social media more frequently than just one when searching for information (Mangold & Faulds, 2009). Yet another trend that has transformed customary marketing approaches is the fact that social media is viewed by users as a more trustworthy source of information (Mangold & Faulds, 2009).

According to researchers Mangold and Faulds (2009), social media has two roles in terms of marketing. The first is to use social media to talk to their consumers, or students in this case. The second is what makes social media so unique; consumers can use it to talk with one another (Mangold & Faulds, 2009). Colleges of Agriculture may not have control over what consumers say to one another over social media platforms, but they have the capability to influence those conversations. Control of spreading information is no longer just in the hands of the marketing organization since social media has taken its place within the promotional mix. Colleges should track online buzz, posts, conversations, and news using a monitoring tool to encourage or discourage what is circulating (Barnes & Jacobsen, 2012). They not only have to be aware of the content they provide but the content that is being provided by others beyond their control.

Mangold and Faulds (2009) suggest nine ways to shape and promote discussions on social media between individuals.

1. Provide networking platforms: Customers want to connect with people who have similar interests and preferences to their own. Institutions may reap the benefits of that urge by building groups of like-minded people via social media channels.
2. Use blogs and other social media tools to engage customers (students): When users can submit feedback, they feel more involved, and invested with institutions.
3. Use both traditional and Internet-based promotional tools to engage customers (students): People often communicate more through word-of-mouth and social media when they are engaged with the program or idea and become natural supporters of the cause.
4. Provide information: When users feel they are familiar and know a lot about an institution, they feel more at ease to talk and express their thoughts about it.

5. Be outrageous: Ridiculous or outrageous things tend to draw people's attention and elicits conversation. Being outrageous is a highly effective promotional strategy.
6. Provide exclusivity: People identify with feeling special and unique as individuals.
7. Design products with talking points and consumer-desired self-images in mind: Products, services, events, etc. should be planned with attention given to speaking points, to promote interactions focused on word-of-mouth, and virtual communications via social media. When something supports the way a person wants to be thought of or their desired self-image, they often will discuss it with others or post on social media.
8. Support causes that are important to consumers (students): When someone feels emotionally linked or it is important to someone, they are more likely to tell others.
9. Utilize the power of stories: Stories are often repeated because they are unforgettable; the more memorable the more likely it is to be repeated.

By understanding the elements of social media and how it functions, marketing administrators can better incorporate it into their marketing framework. Using the strategies above, Colleges of Agriculture will be more effective in communicating with their target audience. Administrators may not be able to control the content on social media as they were with traditional forms of media, but with a coordinated, unified, and focused promotional message, they can shape the message about their college on social media (Mangold & Faulds, 2009).

There is a need to know more than which social media platforms students are using, or to rely on sound marketing strategies. There should also be an understanding of how potential students are using social media distinguished as well for marketing efforts on social media to be

effective. Turner (2017) reported, “While students may spend several hours a day on Instagram or Snapchat, for example, that doesn’t mean that those channels are used for college information-gathering and decision-making” (p. 32). Researchers Barnes and Jacobsen (2012) agree, the usage of social media does not automatically equate with effectiveness of social media. Turner (2017) describes that students are in the gathering information phase of the college decision process, they are more inclined to use college websites and review sites. Once students start to refine their list of possible colleges, they turn to social media to get a feel of what the campus and students are like. Two out of five students use social media to make a decision on which college to attend (Turner, 2017). Social media is useful in influencing college choice, but not as useful in increasing college awareness among potential students.

Colleges of Agriculture Social Media Presence

Colleges are using social media in various ways on differing platforms to fully reach their audience. When asked to identify uses of social media, institutions responded with student recruitment, alumni relations, student communication, public relations, student retention, branding, community building, engagement, and event promotion being at the top of the list (Barnes & Jacobsen, 2012). A commonality among these things are they are intangible. The only tangible object reflecting the standard of a college education is a diploma. With so much relating to college life being intangible, great importance is placed on experiences that leave positive, authentic impressions to students (Gregory, 2018). Researchers DeAndrea et al. (2012) account, “Reducing uncertainty about college and shaping positive expectancies through social media can go a long way in facilitating a healthy transition to college” (p. 16). Some common ways Colleges of Agriculture are using social media to connect and communicate those positive

impressions with students are through content, relevance, engagement, and connectedness within their social media platforms.

Social Media Content

Social media platforms support various types of content such as photos, videos, links, and text. Quality of content presented is also reported as significant when considering effectiveness (Safko, 2012). Colleges are meeting students through specific content such as virtual tours, school pride, alumni groups, sharing department content, reaching out to prospective students, and advertising (Kessler, 2011). AU offers four different live webcam views of their campus, as well as multiple virtual walking tours posted on YouTube bringing the campus instantly to students. Each of the Universities, AU, CU, LSU, UF, and UGA, all present various virtual tours of campuses and programs on their webpages. Virtual tours allow students to virtually navigate a walking tour that they could take in person (Kessler, 2011). Universities show tours of the entire campus but colleges within the university can connect on a more intimate level with students with their own campus tours within the college. These often show the programs, instructors, and buildings of the Colleges of Agriculture giving prospective students authentic images so they can imagine what life on campus would be like.

Blogging is a way college administrators create a feeling of connectedness for students. DeAndrea et al. (2012) states, “Blogs can be used in academia to connect students, foster social support, and promote self-expression” (p. 16). Some colleges use administrators to create and maintain blogs, while other colleges hire current students to be the curators. Research has shown that content created by users has an important role to play in affecting the branding of goods, services, companies, and even colleges (Liu et al., 2019). Using students to create and communicate through blogs or as mini blogs via Twitter yield effective and trusted content.

According to Turner (2017), “Students prefer less produced more authentic posts” (p. 33). Peer generated content posted on blogs and other social media platforms give current and prospective students an authentic, meaningful way to learn about institutions through the eyes and voices of current students and faculty (Getty, 2015). Blogs allow others to comment giving them a voice as well as the author. Students want to engage in the conversation and not just be spoken to (Getty, 2015). This conversation can transpire via a blog or other social media outlets.

Frequency, how often content should be posted on social media, is another element that is significant (Gregory, 2018). There has been little research conducted as to how often colleges are expected by their audiences to post on social media. Frequency of posts can vary depending on the social media type. However, many colleges will post similar information across all of their social media channels at once making it a much simpler task for administrators and widening their reach among their audience.

Social Media Relevance

Merriam-Webster dictionary (n.d.) defines relevance “as the ability to retrieve material that satisfies the needs of the user.” The definition points directly back to the framework that this study is based on; the uses and gratifications theory, which will be discussed further in this chapter. Social media is used to satisfy a need of the user. With that in mind, students need to find relevance in the social media content posted by institutions in order to find value in it. Social media provides a channel where current and potential students can actively participate in what is relevant and important to them concerning their college experience. Tailoring relevant topics to specific media channels will increase marketing reach, garnering more attention from college’s audience.

Social Media Engagement

The advent of social media has provided opportunities to develop peer-support networks in ways that may not have been historically possible before students arrived on campus (DeAndrea et al., 2012). This helps students to begin college with a more substantial social network than they would have had otherwise. Along with establishing and maintaining interpersonal connections, social media sites can lead students as they enter the new social environment of college life. Fans, followers, hits, likes, favorites, shares, hashtags all linking back to the college suggests engagement of students on social media with the college as well as with their peers.

Social media is also a way that students are able to have peer-to-peer interaction. Beattie et al. (2019) state “Using social media as tool for social interaction is derived from the motivation to communicate with others in a designed space” (p. 205). Students can communicate with other students via Facebook groups set up by organizations/clubs or classes within the college, student blogs, etc. Peers, as well as colleges, are disseminating information to students. With Colleges not the sole sender of information, they cannot control the communication but as previously discussed, they can steer it (Mangold & Faulds, 2009). Researchers Mangold and Faulds (2009) noted students are more apt to believe fellow peers and consider them more trustworthy and authentic. It is very important that Colleges give a feeling of authenticity to their students leading to trust.

Social Media Connectedness

Sites on social media provide a unique opportunity to facilitate social interaction in the college setting. Learning about peers and college through social media sites can help students to have university satisfaction and affiliation (DeAndrea et al., 2012). This feeling of connectedness

with their College can be created through their engagement with their College or peers on social media. Researchers DeAndrea et al. (2012) argue the feeling of inclusion with their college community is in direct relationship with adjustment to college life.

Social media platforms of institutions are also used to “brand” the college and entice people to essentially join or follow (Turner, 2017). Joining for a prospective student would necessitate attracting them to come to campus either virtually or in-person to get a sense of how the campus feels and to see if they could feel like part of the family. The desire to trust and believe in a college can be met through branding. Students want to feel part of something real and authentic. For current students, joining would encompass being engaged with functions and activities that are going on with the college in person, online, or both.

Alumni are also an important sector that social media reaches to help deepen the sense of pride that is felt for their college. Alumni give funds and networking opportunities back to their alma mater. They also provide an authentic connection for new students to someone who has been in their shoes and made it through. This creates a life-line for new students. New students connecting with seasoned alumni and alumni living vicariously through them, allow both alumni to stay connected to their college as well as new students to deepen this connection (Kessler, 2011).

Uses and Gratifications Theory

This study was structured using the uses and gratifications theory, which seeks to explain why people are pursuing media outlets to meet personal needs and the implications of their media use (Katz et al., 1974). The audience within the context of the uses and gratifications theory is active rather than passive. It suggests users are not passively participating in their media selection but rather seeking media sources that will ultimately satisfy their needs. In 1973,

researchers Katz et al. performed the first research examining the relationship between the motivation of the viewer, the media satisfaction and the outcome. Delving into the psychological perspective of what mix of characteristics renders different media sources more or less ideal for fulfilling various personal needs (Katz et al., 1973).

There are five elements of the uses and gratifications model that researchers Katz et al. (1974) outlined:

1. The audience is perceived as active as they seek to select media to satisfy their need.
2. The audience has free will to choose their media of choice.
3. The media outlets are competing with other sources to satisfy the audiences' needs.
4. The audience is self-aware of their needs and media choices. They can articulate their decisions when questioned.
5. Value judgments should not be made toward differing media.

Because the uses and gratifications theory provides a unique perspective as to why people use certain media content, this theory has been applied to a broad variety of situations associated with mediated communications (Ko, 2000). Thus, the uses and gratification theory is applied whenever a new form of media comes to fruition. Traditionally, the uses and gratification theory was applied to media such as television, radio, and printed materials. With users actively seeking out the media that best fulfills their needs and the advent of the internet, which alone accomplishes several functions that were performed by traditional media outlets, the theory was employed in Ko's (2000) research.

Ko (2000) used a self-reported questionnaire to collect data on internet usage motivation. Participants showed their level of agreement with statements using nine motivational dimensions (Ko, 2000). The nine dimensions were:

1. Information: “To learn about things that are useful” and “Because it helps me solve a certain problem,”
2. Pass Time: “To pass the time” and “When I have nothing better to do,”
3. Entertainment: “Because it entertains me” and “Because it’s enjoyable,”
4. Surveillance: “To keep up with what’s going on in the world” and “To learn about things that I have known,”
5. Social Interaction: “So I can talk with other people about what’s going on,”
6. Habit: “Because it’s a habit, just something I do” and “Because I just like to surf the Internet,”
7. Escape: “To forget about school or any other chores in my life” and “I can get away from my problems at hand,”
8. Companionship: “When there’s no one else to talk or to be with” and “To reduce feeling loneliness,”
9. Interactive Control: “Because I can decide which site to visit and not visit by my own free will” and “Because it’s interactive.”

Audiences have numerous options to varying forms of media as more technologies emerge. Audiences are choosing which form of media and technology in order to meet their need. The uses and gratification theory offers insights regarding the reasons why individuals are choosing certain media types to obtain the gratification desired. Researchers Katz et al. (1973) attest that the central notion media is used by individuals to connect themselves by instrumental, affective or integrative relations with others such as self, family, friends, etc. These researchers surmised that individuals felt the need to be connected through different forms of media based on the association they desired (Katz et al., 1973).

Future Investment

As colleges question if social media efforts are worth allocating funds away from traditional forms of media, respondents were split (Barnes & Jacobsen, 2012). Some colleges opt to utilize free social media tools and make minimal investments on promotional fees while others fully embrace the idea. Those fully invested in marketing through social media may have employees specifically focused on social media, premium account subscriptions, advanced analytics, and paid social media advertising (Barnes & Jacobsen, 2012). Some institutions are attempting to measure effectiveness of social media efforts by comments, number of followers, number of page views, analytics (such as Google analytics), and/or student surveys. Overall measures are insufficient. Researchers Barnes & Jacobsen (2012) concluded that measuring, monitoring, and tracking were areas where colleges need to increase their focus of attention.

Summary

In summary, minimal research has been conducted on the influence and effectiveness of social media efforts among colleges. There is currently no research specifically addressing student perceptions and effectiveness of Colleges of Agriculture social media influence and retention efforts nor guidance for incorporating social media into their marketing strategies. Research has established that colleges are using social media as a marketing tool to connect and communicate with potential and current students. Colleges are using social media to shape and encourage communication with and among students through social media content, relevance, engagement, and connectedness but with no instruments to measure if their efforts are effective. Colleges of Agriculture can use this instrument to create and revise existing social media practices as well as to justify resources being allocated to social media efforts.

CHAPTER III: METHODS

The purpose of this study was to ascertain the perceptions and the influence social media of Colleges of Agriculture has among their first-year and first-year transfer students. To accomplish this purpose, this study developed an instrument based on prior research, post-secondary agriculture student perceptions regarding social media platforms, and social media of Colleges of Agriculture. The methods and procedures used in developing and conducting this research study are discussed within this chapter.

Research Approach and Design

The methodology employed for this study was a quantitative survey design. Creswell (1994) defines quantitative research as “an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers, and analyzed with statistical procedures, in order to determine whether the predictive generalizations of the theory hold true” (p. 2). Creswell (2009) further stated that a survey design offers descriptions of opinions of a population by studying a sample of that population. Researchers Campbell and Stanley (1973) refer this survey methodology as a one-shot case study allowing for exploration and generalization through comparison and contrasts of a sample population. This descriptive and correlational study used a quantitative non-experimental survey research design. This method was chosen because of the type of data being collected, its intended use, research objectives, and the population that was being studied. Data was collected through an online Qualtrics questionnaire. Participants were able to access the questionnaire from home with no risk of contact due to social distancing restrictions during the COVID-19 pandemic.

Purpose and Objectives of the Study

The purpose of this study was to determine first-year student perceptions and effectiveness of social media influence in Southeastern Land-Grant Universities Colleges of Agriculture. The study describes first-year students within Colleges of Agriculture addressing their College of Agriculture's social media platforms such as Facebook, Twitter, Instagram, Snapchat, YouTube, Flickr, LinkedIn, and Pinterest. The focus of this investigation was social media of Colleges of Agriculture as a communication, retention, and occupational resources. Research objectives for this study are based on the AAAE National Research Agenda Priority 3 #15: "What methods, models and practices are effective in recruiting agricultural leadership, education and communication practitioners, and supporting their success at all stages of their careers?" (Roberts et al., 2016, p. 31).

Objectives

1. Identify personal and academic characteristics of the target population.
2. Identify social media platforms and other communication channels of the Colleges of Agriculture used by students.
3. Describe the effectiveness of social media on student communication, retention, and occupational resources within the College of Agriculture.

Participants

This study's target population included first-year and first-year transfer post-secondary students enrolled in public land-grant Southeastern University Colleges of Agriculture. Four Southeastern United States Colleges of Agriculture participated in this study from the states of Louisiana, Florida, Georgia, and North Carolina. Students receiving the questionnaire were enrolled in introductory agriculture courses or enrolled within Colleges of Agriculture. Some participating Colleges of Agriculture did not have first-year students enrolled in introductory

agriculture courses because enrollment in those courses fall after a student's first year. In order to capture the target population of first-year students, questionnaires were sent to the entire first-year and first-year transfer student population of three of the participating colleges. Students were asked to select if they were a first year student, first year transfer student or other so that any questionnaires could be pulled that did not meet participation criteria. Another question asking students to select their major was incorporated to ensure respondents were from Colleges of Agriculture. Participants not meeting this specification were removed from the data set.

The population of this study fall within the following parameters:

- First-year students during the 2019-2020 school year
- Or transfer students within their first year at that school during the 2019-2020 school year
- Enrolled in a public land-grant Southeastern University
- Identified as College of Agriculture Major

Institutional Review Board

Auburn University's Institutional Review Board (IRB) reviews all research activities that involve human subjects for compliance with federal, state, local and institutional regulations, guidelines, and ethical research principles. All human research studies require authorization before any inquiry can commence. Auburn University's IRB granted approval upon submission of appropriate applications and information to the IRB review board. Approved forms are included in Appendix 1.

Instrumentation

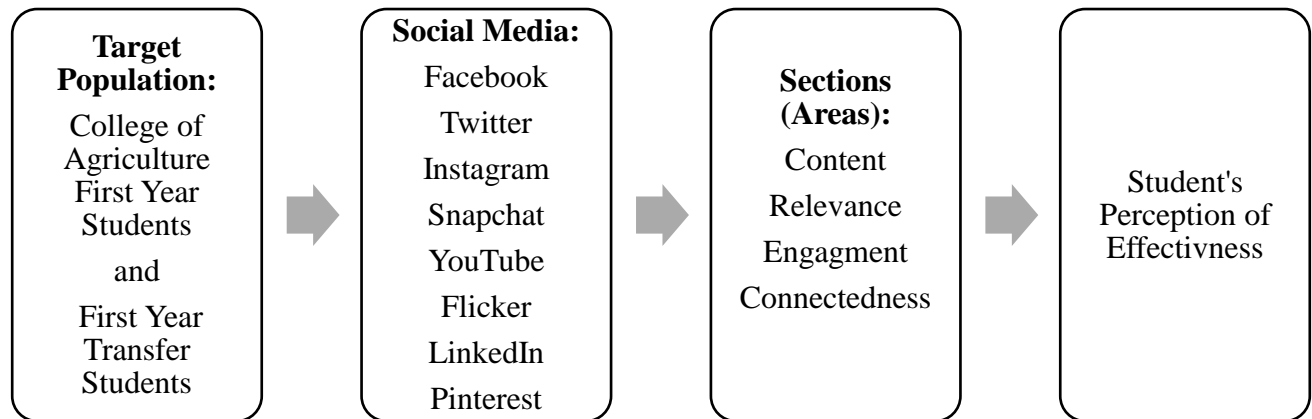
After reviewing accessible and relevant literature it was determined that no instruments existed to examine post-secondary student perceptions and influence of Colleges of Agriculture

social media. Therefore, an initial instrument was developed by the researcher in collaboration with others based on relevant research, the uses and gratification theory (Katz et al., 1974), and modeled after Gregory’s (2018) instrument, Perceptions of Quality of Social Media Practices During the Admissions Cycle. Gregory’s (2018) instrument was chosen because it accessed participants’ perception of their institution’s social media presence during their first year of college. Wildman and Torres’(2001) instrument was also utilized for a model to categorize personal characteristics of participants.

The instrument contained 44 questions and divided into two sections; social media (35 questions) and participant characteristics (9 questions). Items were further divided into the following areas concerning social media: (1) platforms and usage, (2) content, (3) relevance, (4) engagement, and (5) connectedness. This is illustrated in Figure 2.

Figure 2

A Conceptual Model Leading to Effectiveness of Social Media by Colleges of Agriculture

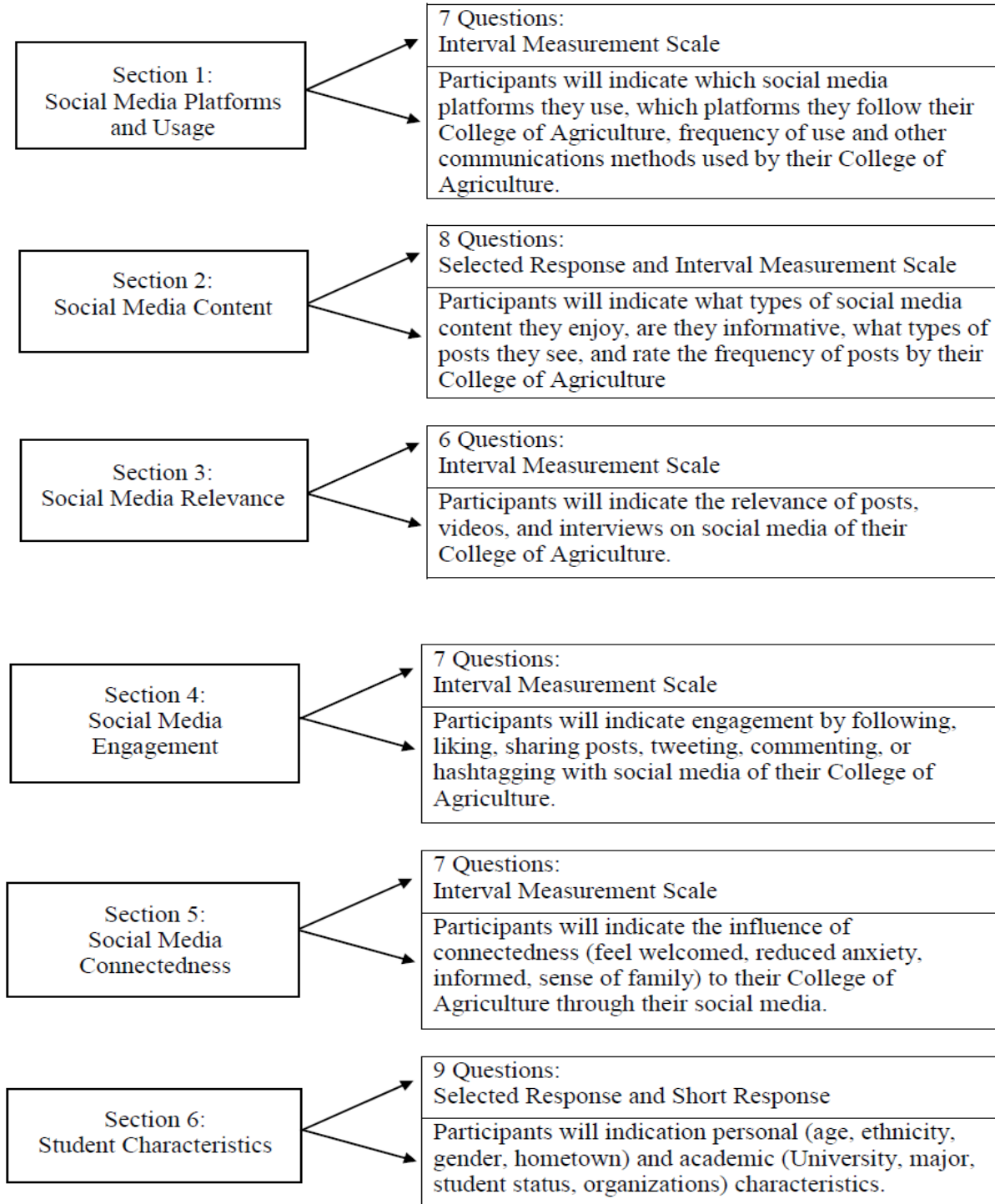


Each of the five areas were divided into sections. Section one contained questions regarding participants’ type and frequency of social media use. Questions were designed using a

5 point interval measurement scale: strongly agree (5), agree (4), neither agree nor disagree (3), disagree (2), and strongly disagree (1). Section two, social media content, was composed of selected response questions and statements asking participants to rate their agreement regarding their College of Agriculture's social media content using the interval measurement scale to gauge participants' level of agreement or disagreement with the statements. Section three (social media relevance), section four (social media engagement), and section five (social media connectedness) all utilized the interval measurement scale for response options. Participant characteristics questions used categorical selection options and open text fields where necessary. A blueprint of the instrument's design is shown in Figure 3.

Figure 3

Instrument Blueprint



The instrument was tailored to enable participants to easily use smartphones to complete the questionnaire. Dillman et al. (2014) credits mobile devices, such as smartphones and tablets, as the primary way that some people connect to the Internet. Dillman et al. (2014) suggests avoiding open-ended questions that often yield detailed answers if a number of participants are expected to use a smartphone or table to respond. The survey design was considered to accommodate smaller screens as participants often choose to use smart phones or tablets to participate for the accessibility and convenience. Nonetheless, participants were instructed it was best to use a desktop computer as they took the questionnaire.

Reliability

The instrument was tested for both face and content validity and reliability. Ross and Shannon (2016) state, “The extent to which our data-collection instruments, or processes, measure what they are supposed to measure is an indication of validity” (p. 235). Content validity measures the connection between the indicators (or content of the items) and the constructs addressed in the study (Ross & Shannon, 2016). Face validity refers to the extent at which the instrument appears to measure what it claims to. A panel of Auburn faculty and administrators reviewed the questionnaire for readability and appropriateness of content coverage. As a result of their feedback and evaluation, some design suggestions were recommended. Appropriate modifications were made at that time. The instrument was then subjected to further testing.

Pilot study (1) was conducted with a representative group of participants for content and face validity (Lindner, et al., 2001). The pilot study was vital for managing measurement error to ensure that the statements and questions were appropriate for the objectives under investigation (Dillman, Smyth, & Christian, 2014). Pilot study (1) was conducted to ensure questions were

interpreted the way the researcher intended. Questions/statements were provided to the pilot participant group using a paper copy and submitted back to the researcher upon completion. The panel was asked to use their expertise to indicate ambiguous statements, grammatically problematic phrases, or leading questions. After a review of their responses, interviews were conducted individually to gain further feedback. Based on the panel's responses and interviews, the instrument was considered acceptable and ready for the second pilot study to begin.

Reliability is the ability of a measure to yield consistent results. Ross and Shannon (2016) reported "the more consistent results from an evaluation method are, the more reliable they are." (p. 237). To test for reliability and internal validity, a pilot test was administered to 15 ($N = 15$) post-secondary agricultural education students enrolled in at least one agricultural education course at AU that were not part of the study. The population of the pilot study was representative of the target population as they are agricultural students enrolled in a Southeastern Land-Grant University. The pilot study was crucial to control the measurement inaccuracies to ensure that statements and questions were acceptable for the objectives of the study (Dillman et al., 2014).

To further test the reliability of the instrument, Cronbach's alpha was calculated using SPSS, Version 26. This measure indicated how well questionnaire items and variables which measure similar concepts correlate with one another. Cronbach's alpha ranges from 0 to 1. Cronbach's alpha was calculated for the areas within the instrument to determine their internal consistency within the pilot study. A coefficient greater than 0.7 is generally agreed upon as an acceptable level of reliability (Gliem & Gliem, 2003). Results for Cronbach's alpha for the pilot study ($N = 15$) in the four areas are as follows: social media content ($\alpha = 0.907$), social media relevance ($\alpha = 0.907$), social media engagement ($\alpha = 0.909$), and social media connectedness ($\alpha = 0.918$). The results indicated a high degree of internal consistency. At the conclusion of the

pilot test, the researcher and Auburn faculty analyzed the results. The instrument was found to be valid and suitable for the study to begin.

Data Collection

Four Southeastern Land-Grant Public University Colleges of Agriculture choose to participate in the study. The researcher worked closely with contacts of the four institutions as participant selection was made. Institutions had differing list serve capabilities so the distribution was varied among survey sites. Questions within the instrument were in place to offset this issue to ensure data was uniform across the population when analyzed. The target population for the study remained the same for all participating Colleges of Agriculture institutions; first-year or first-year transfer students within the College of Agriculture.

The researcher distributed all information to contacts of the institutions for the study to begin. Data collection spanned approximately one month (April-May, 2020). Contacts received an email including a letter to survey sites (Appendix 3), a questionnaire email invitation (Appendix 4) and three questionnaire email invitation reminders: invitation reminder letter one (Appendix 5), invitation reminder letter two (Appendix 6), and invitation reminder letter three (Appendix 7). The letter to the participating universities included a thank you for partnering to further the reach of the study, denoted a timeline in which the questionnaire would be first administered, three dates for reminder emails to be sent, and contact information. Dillman et al. (2014) suggested that an invitation email should introduce recipients to the questionnaire, explain why they have been chosen, and emphasize why their response is important. The questionnaire email invitation letter inviting students to participate in the study, included the web address link to begin the instrument through Qualtrics, the researcher, and chair's contact information.

Three reminder emails were sent, as a follow up to increase survey response rate according to Dillman's et al. (2014) recommendation. The content of each email reminder was varied as suggested by Dillman et al. (2014). The first reminder was sent five days after the initial invitation to participate was disseminated. The reminder email explained that the questionnaire invitation had previously been sent, it thanked those who had already responded and asked those who not already participated in the questionnaire to please do so (Appendix 5). The second reminder email was sent nine days after the initial participation invitation. Again with varied wording as recommend by Dillman et al. (2014), it encouraged those who had not yet participated to complete the questionnaire and again thanked those who had already submitted (Appendix 6). Twelve days after the initial invitation, a third and final reminder email was sent. It urged those who had not participated to do so, it highlighted it was a short questionnaire taking approximately ten minutes, responses were confidential, and we were looking forward to their response (Appendix 7). Reminder emails were sent to all participants each time, as there was no way for their contact information to be removed from the contact lists sent by the institutions.

Of the 60 ($n = 60$) responses, 45 percent were received after the initial invitation and before the first reminder email was sent. Following the first reminder, another 18 percent of responses were received. Another 10 percent of responses were received after the second reminder email, while the final 27 percent of responses were received following the third and final reminder email. Based on methods established by Lindner et al. (2001) to address non-response bias an analysis of differences between early and late respondents found there to be no statistically significant differences.

The population for this study included first-year and first-year transfer post-secondary students attending participating Colleges of Agriculture ($N = 574$). Participating colleges

disseminated questionnaires via email as discussed above. A total of 60 ($n = 60$) usable survey responses were returned during the duration of the study, resulting in an overall response rate of 10.5 percent (leaving UF non-response out of the calculations as the number of N was not provided).

Table 2

Response Rate of Participating Land-Grant University Colleges of Agriculture

College of Agriculture	N	<i>n</i>
LSU	254	47
CU	251	9
UGA - Tifton	67	2
UF		2
		<u>60</u>

Note. University of Florida did not provide N.

This is a low response rate. According to the National Survey of Student Engagement (NSSE, 2016), an average response rate for institutions is 28 percent. Fosnacht et al. (2017) found depending on institution size, as few as 25 to 75 respondents yield reliable institution-level estimates for the majority of institutions. Researchers also found consistent estimates can be generated from rather low response rates (Fosnacht et al., 2017). Further decreased rate of response was due to the COVID-19 2020 pandemic. As a result, a number of students may not have participated due to reasons beyond their control. Incentives were not offered for participation.

Data Analysis

The objectives of this study guided the data analysis procedures utilized in this research study. A combination of analysis procedures such as means, standard deviations, frequencies, percentages, Pearson product-moment correlation, and independent t-tests were used to appropriately examine the information collected from the instrument. Collected data were coded and analyzed using SPSS Version 26.

Analysis by each objective

Objective 1: Identify personal and academic characteristics of the target population.

Descriptive statistics is appropriate for the objective in this study as the participants represent an intact group and were not selected at random. Frequency and percent tables were calculated to represent the participant selection. Gender, ethnicity, hometown, age, school status, and major were generated as frequencies and percentages to describe participant characteristics.

Objective 2: To identify social media platforms and other communication channels of Colleges of Agriculture used by students, frequencies and percentages were employed. Participants were questioned regarding which social media channels they use such as Facebook, Twitter, Instagram, Snapchat, YouTube, Flickr, LinkedIn, and Pinterest. Each of these platforms were assigned a code for analysis purposes. Participants were also asked their frequency of use of social media. To determine how social media of Colleges of Agriculture ranked among other communication methods used by participants' Colleges of Agriculture, they were asked to select all other methods of communication that provide information to them from their college. Tables with frequencies and percentages identify which social media platforms are most frequently used, which College of Agriculture social media platforms are most frequently used, how active participants are on social media, and what other College of Agriculture communication methods are reaching participants.

Objective 3: Describe the effectiveness of social media on student communication, retention, and occupational resources within the College of Agriculture was analyzed and data was reported using frequencies, percentages, means, standard deviations, Pearson product-moment correlation, and independent t-tests. Means and standard deviations were used to

describe social media in the following areas of the instrument; content, relevance, engagement, and connectedness. Participants were asked to rate statements based on their perceptions using the following interval measurement scale: strongly agree (5), agree (4), neither agree nor disagree (3), disagree (2), and strongly disagree (1). Frequencies and percentages were used to describe the type of social media posted by Colleges of Agriculture that students enjoyed as well as which posts by their College of Agriculture they commonly see. Ross and Shannon (2016) suggest using a correlation to measure the strength of association between variables. A Pearson product-moment correlation coefficient was used to present the relationship between social media areas (content, relevance, engagement, and connectedness). Davis' (1971) explanation of Pearson r was used to define the strength of the relationship within this study. The magnitude of the correlation coefficient is defined as follows: $.01 \geq r \geq .09$ = Negligible, $.10 \geq r \geq .29$ = Low, $.30 \geq r \geq .49$ = Moderate, $.50 \geq r \geq .69$ = Substantial, $r \geq .70$ = Very Strong (Davis, 1971).

To determine if statistical differences are present between the frequency levels of social media use independent t-tests were calculated. Groups were broken into two groups: low use and high use. Participants accessing social media ten times or less per day were grouped as low use and participants accessing social media eleven or more times per day were grouped as high use. Independent samples t-tests were used to compare the frequency that participants accessed social media on the areas of social media content, relevance, engagement, and connectedness..

CHAPTER IV: DATA ANALYSIS AND FINDINGS

The objective of this chapter is to present the findings of the study following data analysis of each research objective. SPSS Version 26 was used for data analysis and reporting purposes.

Purpose of the Study

The purpose of this study was to determine first-year and first-year transfer student perceptions and the effectiveness of social media influence in Southeastern Land-Grant Universities Colleges of Agriculture. The study describes first-year students within Colleges of Agriculture, addressing their College of Agriculture's social media platforms such as Facebook, Twitter, Instagram, Snapchat, YouTube, Flickr, LinkedIn, and Pinterest. The focus of this investigation was social media of Colleges of Agriculture as communication, retention, and occupational resources.

Study Design

A correlational study design using a quantitative non-experimental method was utilized to investigate and analyze first-year and first-year transfer student perceptions as related to Colleges of Agriculture's social media presence. Four Land-Grant Colleges of Agriculture within the Southeastern United States participated in the study: CU, LSU, UF, and UGA-Tifton. Students receiving the questionnaire were current College of Agriculture first-year or first-year transfer majors. The questionnaire was divided into five areas of interest regarding social media: (1) platforms and usage, (2) content, (3) relevance, (4) engagement, and (5) connectedness. Participants' personal and academic characteristics were also part of the study. Data was collected during the months of April and May of 2020. The questionnaire was administered through Qualtrics and results were analyzed using SPSS Version 26.

Analysis by Study Objectives

The objectives of this study guided the data analysis procedures utilized in this research study. Study objectives were analyzed and reported according to the type of data collected and the most suitable statistical method.

Objective 1: Identify personal and academic characteristics of the target population.

Personal characteristics of the target population are presented in Table 3 below. Females comprised the largest gender group of participants with 79.7 percent ($f = 47$) of respondents. Males consisted of 16.9 percent ($f = 10$) of respondents. One participant 1.7 percent ($f = 1$) responded as “other,” 1.7 percent ($f = 1$) responded “prefer not to say,” and the final participant 1.7 percent ($f = 1$) made no selection. Participants were also asked to self-disclose their race. The majority of participants 86.4 percent ($f = 51$) reported a white ethnicity followed by black or African American 6.8 percent ($f = 4$), Hispanic or Latino 1.7 percent ($f = 1$), Asian or Pacific Islander 3.4 percent ($f = 2$), and other 1.7 percent ($f = 1$). Participants’ hometown varied and are listed in descending order from 33 percent ($f = 20$) reporting they come from a large town, 28.3 percent ($f = 17$) reporting to be from a rural area/small town, 25 percent ($f = 15$) reporting a large city, and 13.3 percent ($f = 8$) reporting a farm or ranch. The overwhelming majority of participants 96.7 percent ($f = 58$) report they were between the ages of 18 to 24 year olds and 3.3 percent ($f = 2$) reported to be between the ages of 25 to 34 year olds.

Table 3*Personal Characteristics of First-year and First-year Transfer College of Agriculture Students*

Personal Characteristics		<i>f</i>	%
Gender:	Female	47	79.7
	Male	10	16.9
	Other	1	1.7
	Prefer not say	1	1.7
	No selection made	1	1.7
Ethnicity:	White	51	86.4
	Black / African American	4	6.8
	Asian / Pacific Islander	2	3.4
	Hispanic / Latino	1	1.7
	Other	1	1.7
Hometown:	On a farm or ranch	8	13.3
	In a rural area/small town (10,000 or less)	17	28.3
	In a large town (10,000 to 50,000)	20	33.3
	In a large city (50,000 or more)	15	25.0
Age:	18 - 24	58	96.7
	25 - 34	2	3.3

Academic characteristics of the target population are presented in Table 4 below. The majority of student participants 83.3 percent ($f = 50$) were first-year students with the remaining respondent's 16.7 percent ($f = 10$) being first-year transfer students. College of Agriculture majors reported by participants varied widely. The majority of majors were Animal Science 43.3 percent ($f = 26$). Natural Resources, Ecology and Management/Wildlife was selected second highest 15 percent ($f = 9$) with the remaining 41.7 percent ($f = 25$) coming from nine other majors within Colleges of Agriculture.

Table 4*Academic Characteristics of First-year and First-year Transfer College of Agriculture Students*

Academic Characteristics		<i>f</i>	%
School Status:	First-year Student	50	83.3
	First-year Transfer	10	16.7
Major:	Animal Science	26	43.3
	Natural Resources, Ecology & Management / Wildlife	9	15.0
	Food Science / Nutrition	6	10.0
	Ag Extension / Ag Education	5	8.4
	Agribusiness	5	8.3
	Plant & Soil Systems	2	3.3
	Plant Science	2	3.3
	Textiles, Apparel & Merchandising	2	3.3
	Ag Marketing	1	1.7
	Environmental Management Systems	1	1.7
	Wildlife & Fisheries	1	1.7

Objective 2: Identify social media platforms and other communication channels of the Colleges of Agriculture used by students.

Participants were asked selected questions about their social media usage and habits. As reported in Table 5, College of Agriculture students were asked to identify the social media platform they use most often between four popular social media platforms. Findings show 50 percent ($f = 30$) used of participants Snapchat, 31.7 percent ($f = 19$) Instagram, followed by 11.7 percent ($f = 7$) used Facebook, and 6.7 percent ($f = 4$) Twitter.

Table 5*Social Media Platform Used Most Often by First-Year and First-Year Transfer College of Agriculture Students*

Social Media Platform	<i>f</i>	%
Snapchat	30	50.0
Instagram	19	31.7
Facebook	7	11.7
Twitter	4	6.7
Total	60	100.0

Results presented in Table 6 reveal social media platforms used by participants.

Participants were asked to select all social media platforms that they used, not considering frequency of use, in order to assess the reach of social media among the targeted population. The social media platform used by more respondents than any other was Instagram with 95 percent ($f = 57$) followed closely by Snapchat with 91.7 percent ($f = 55$). Other social media platforms fell behind those with 80.3 percent ($f = 48$) of respondents using YouTube, 71.7 percent ($f = 43$) used Facebook, 48.3 percent ($f = 29$) Twitter, 45 percent ($f = 27$) Pinterest, 18 percent ($f = 11$) LinkedIn, and only 1.7 percent ($f = 1$) Flickr.

Table 6

Social Media Platforms Used by First-year and First-year Transfer College of Agriculture Students

Social Media Platform	<i>f</i>	%
Instagram	57	95.0
Snapchat	55	91.7
YouTube	48	80.0
Facebook	43	71.7
Twitter	29	48.3
Pinterest	27	45.0
LinkedIn	11	18.3
Flickr	1	1.7

Next, participants were asked to select their top three social media platforms used. This information is displayed in Table 7 and was used to gauge where the student participants spent their time on social media. Participants selected Snapchat with a percentage of 86.7 ($f = 52$) and Instagram 81.7 percent ($f = 49$), YouTube 40 percent ($f = 24$), Facebook 38.3 percent ($f = 23$), Twitter 35 percent ($f = 21$), Pinterest 8.3 percent ($f = 5$), and lastly LinkedIn 3.3 percent ($f = 2$).

Table 7*Top 3 Social Media Platforms Used by First-Year and First-Year Transfer College of Agriculture Students*

Social Media Platform	<i>f</i>	%
Snapchat	52	86.7
Instagram	49	81.7
YouTube	24	40.0
Facebook	23	38.3
Twitter	21	35.0
Pinterest	5	8.3
LinkedIn	2	3.3
Flicker	0	0.0

Though students use the social media platforms previously mentioned, this does not guarantee that they follow their College of Agriculture on that platform. To understand which social media platforms of their College of Agriculture participants were actually using, participants were asked to indicate which social media platforms they “follow” or “like” their College of Agriculture. Allowing the researcher to distinguish between participants’ normal social media platform usage versus social media platform usage involving the College of Agriculture. As reported in Table 8 this is the following breakdown: 60 percent ($f = 36$) of participants follow their College of Agriculture on Instagram, 41.7 percent ($f = 25$) on Facebook, and 10 percent ($f = 6$) on Twitter. There are 18.3 percent ($f = 11$) of participants that do not follow their College of Agriculture on any social media platforms even though they are active on social media platforms. It is important to note, there were no participants that selected they follow their College of Agriculture on Snapchat, yet Snapchat was selected by 86.7 percent ($f = 52$) as being one of their top three social media platforms.

Table 8*Social Media Platforms Followed by First-year and First-year Transfer College of Agriculture Students*

Social Media Platform	<i>f</i>	%
Instagram	36	60.0
Facebook	25	41.7
Twitter	6	10.0
Snapchat	0	0.0
YouTube	0	0.0
Flicker	0	0.0
LinkedIn	0	0.0
Pinterest	0	0.0
None: I do not follow my College of Agriculture on social media.	11	18.3

Participants were asked two separate questions regarding their social media use to analyze which social media platforms students use and if they are participating with the College of Agriculture on those same social media platforms. Participants were asked to select their top three preferred social media platforms. They were also asked to select which social media platforms did they follow their College of Agriculture. The results presented in Table 9, compare the social media platforms used by participants versus the social media platforms in which they follow their College Agriculture. A difference in scores was calculated and show the largest difference in scores is Snapchat. This indicated Snapchat as the social media platform that Colleges of Agriculture are least likely to be connecting with their students. The smallest difference in scores is Facebook showing it to be the social media platform that Colleges of Agriculture are most often connecting with their students.

Table 9

Top 3 Social Media Platforms Used versus College of Agriculture Social Media Accounts Followed by First-year and First-year Transfer College of Agriculture Students

Social Media Platform	Social Media Platforms Used		Social Media Accounts Followed		Discrepancy between platforms used and platforms followed
	<i>f</i>	%	<i>f</i>	%	
Snapchat	52	86.7	0	0.0	52
Twitter	21	35.0	6	10.0	15
Instagram	59	81.7	36	60.0	13
Facebook	23	37.7	25	41.7	2

To distinguish how often participants check social media accounts per day, they were asked to select their frequency of use, shown in Table 10. The majority 48.3 percent ($f = 29$) of respondents selected they check social media between 4 to 10 times per day followed by 38.3 percent ($f = 23$) check over 10 times per day. The remaining respondents 8.3 percent ($f = 5$) check between 2 to 3 times a day, 3.3 percent ($f = 2$) check once a day, and a single respondent 1.7 percent ($f = 1$) check their social media less than once a day.

Table 10

Frequency First-year and First-year Transfer College of Agriculture Students Access Social Media

Frequency of Social Media Use	<i>f</i>	%
Less than once a day	1	1.7
Once a day	2	3.3
2 to 3 times a day	5	8.3
4 to 10 times a day	29	48.3
Over 10 times a day	23	38.3

As presented in Table 11, 76.7 percent ($f = 46$) participants expect their College of Agriculture to have a presence on social media leaving the other 23.3 percent ($f = 14$) not expecting that of their College.

Table 11

Expectation for College of Agriculture to have a presence on Social Media by First-year and First-year Transfer College of Agriculture Students

Social Media Expectation	<i>f</i>	%
Yes, I expect my College of Agriculture to have a social media presence.	46	76.7
No, I do not expect my College of Agriculture to have a social media presence.	14	23.3

To determine how social media ranked when compared to other communication methods used by Colleges of Agriculture, participants were asked to select which communication methods used by their College of Agriculture reached them. Data is presented in ranking order in Table 12. Email 96.7 percent ($f = 58$) was the most frequent form of communication to reach participants, class communication 76.7 percent ($f = 46$), social media 53.3 percent ($f = 32$), printed materials 51.7% ($f = 31$), personal contact with other students 48.3 percent ($f = 29$), personal contact with professors 45 percent ($f = 27$), websites 43.3 percent ($f = 26$), and lastly club meetings 31.7 percent ($f = 19$). It is important to note that digital communication, be it email or social media, are two of the three highest forms of communication used that reach participants.

Table 12

Communication Methods used by the College of Agriculture to reach First-year and First-year Transfer College of Agriculture Students

College of Agriculture Communication Methods	Rank	<i>f</i>	%
E-mail	1	58	96.7
In class	2	46	76.7
Social Media	3	32	53.3
Printed materials (signs, posters, etc.)	4	31	51.7
Personal contact with other students	5	29	48.3
Personal contact with professors	6	27	45.0
Website	7	26	43.3
Club meetings	8	19	31.7

Objective 3: Describe the effectiveness of social media on student communication, retention, and occupational resources within the College of Agriculture.

Social Media Content

Participants were asked to rate statements relating to social media content of their College of Agriculture based on their perceptions using the following scale: strongly agree (5), agree (4), neither agree nor disagree (3), disagree (2), and strongly disagree (1). As reported in Table 13, participants on average agreed perceived that the variety of social media content used by the College of Agriculture was appropriate ($M = 4.0$) Participants tended to agree that College of Agriculture social media posts are informative ($M = 3.85$), social media posts sure occur more frequently from the College of Agriculture ($M = 3.78$), and the College of Agriculture's social media posts have informed them of possible internships ($M = 3.70$). Participants tended to agree or neither agree nor disagree when asked if College of Agriculture's social media posts have informed them potential careers ($M = 3.53$). Participants were inclined to disagree or either agree nor disagree when asked if social media posts should occur less frequently from the College of Agriculture ($M = 2.57$). It would make sense that if more students feel the College of Agriculture should post on social media more frequently ($M = 3.78$), then the mean of students to select that they should post less frequently would be less ($M = 2.57$) as it does.

Table 13*Social Media Content Information as Perceived by First-year and First-year Transfer College of Agriculture Students*

Content Questions	<i>M</i>	<i>SD</i>
The variety of social media content (posts, videos, pictures, polls, etc.) used by College of Agriculture is appropriate.	4.00	0.76
College of Agriculture social media posts are informative.	3.85	0.76
Social media posts should occur more frequently from the College of Agriculture.	3.78	0.85
The College of Agriculture’s social media posts have informed me of possible internships.	3.70	1.12
The College of Agriculture’s social media posts have informed me of potential careers.	3.53	1.05
Social media posts should occur less frequently from the College of Agriculture.	2.57	1.02

Note. Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5=Strongly Agree.

Types of social media posts enjoyed by participants are shown in Table 14. Both upcoming College of Agriculture events and available internships posts 80 percent ($f = 48$) are enjoyed the most, available career posts 78.3 percent ($f = 47$), fun facts 56.7 percent ($f = 35$), news about the College of Agriculture 56 percent ($f = 34$), images 51.7 percent ($f = 31$), student spotlights 46.7 percent ($f = 28$), information on different majors 46.7 percent ($f = 28$), club meeting information 45 percent ($f = 27$), alumni spotlights 28.3 percent ($f = 17$), and lastly alumni events 15 percent ($f = 9$).

Table 14

Types of Social Media Posts Enjoyed by First-year and First-year Transfer College of Agriculture Students

Content: Types Social Media Posts Enjoyed	Rank	<i>f</i>	%
Upcoming College of Agriculture events	1	48	80.0
Available internships	2	48	80.0
Available careers	3	47	78.3
Fun facts	4	35	58.3
News about the College of Agriculture	5	34	56.7
Images	6	31	51.7
Student spotlights	7	28	46.7
Information on different majors	8	28	46.7
Club meeting information	9	27	45.0
Alumni spotlights	10	17	28.3
Alumni events	11	9	15.0

Table 15 presents what students perceive as the types of social media posts commonly posted by the College of Agriculture. The results are as follows: news about the College of Agriculture was the most common at 61.7 percent ($f = 37$), upcoming College of Agriculture events 56.7 percent ($f = 34$), student spotlights 41.7 percent ($f = 25$), alumni spotlights 41.7 percent ($f = 25$), available internships 38.3 percent ($f = 23$), available careers 31.7 percent ($f = 19$), alumni events 23.3 percent ($f = 14$), images 21.7 percent ($f = 13$), fun facts 15 percent ($f = 9$), information on different majors 13.3 percent ($f = 8$), and club meeting information 13.3 percent ($f = 8$).

Table 15

Types of Social Media Posts Commonly Seen by First-year and First-year Transfer College of Agriculture Students

Content: Types Social Media Posts Seen	Rank	<i>f</i>	%
News about the College of Agriculture	1	37	61.7
Upcoming College of Agriculture events	2	34	56.7
Student spotlights	3	25	41.7
Alumni spotlights	4	25	41.7
Available internships	5	23	38.3
Available careers	6	19	31.7
Alumni events	7	14	23.3
Images	8	13	21.7
Fun facts	9	9	15.0
Club meeting information	10	8	13.3
Information on different majors	11	8	13.3

When assessing the type of social media content from College of Agriculture accounts that participants enjoy as opposed to what was most commonly posted, the areas that administrators need to address can be identified (Table 16). The greatest difference in frequencies was available careers posts at difference of 28. Meaning 47 respondents enjoy this type of post but only 19 respondents report to commonly observe this type of post from their College. The next greatest discrepancy in frequencies was fun facts at 26, followed closely by available internships at 25. Student spotlights and news about the College of Agriculture show the least discrepancy in frequencies at only three meaning that Colleges of Agriculture were posting this content with a frequency their students enjoy.

Table 16

Types of Social Media Posts Enjoyed Versus What is Commonly Observed by First-year and First-year Transfer College of Agriculture Students

Content: Types Social Media Posts	Enjoyed		Observed		Discrepancies in frequencies
	<i>f</i>	%	<i>f</i>	%	
Available internships	48	80.0	23	38.3	25
Upcoming College of Agriculture events	48	80.0	34	56.7	14
Available careers	47	78.3	19	31.7	28
Fun facts	35	58.3	9	15.0	26
News about the College of Agriculture	34	56.7	37	61.7	3
Images	31	51.7	13	21.7	18
Information on different majors	28	46.7	8	13.3	20
Student spotlights	28	46.7	25	41.7	3
Club meeting information	27	45.0	8	13.3	16
Alumni spotlights	17	28.3	25	41.7	8
Alumni events	9	15.0	14	23.3	5

Social Media Relevance

Respondents were asked to rate their level of agreement with statements relating to their perception of the relevance of the College of Agriculture's social media (Table 17) using the following scale: strongly agree (5), agree (4), neither agree nor disagree (3), disagree (2), and strongly disagree (1). Overall, respondents perceive social media posts made by their College of Agriculture to be relevant to them as they tend to agree in the relevance of posts with a mean of 3.72. However, when asked about specific posts the results are as follows: on average participants are inclined to agree ($M = 3.75$) that pictures posted by their College or Agriculture are perceived to be the most relevant, followed by student interviews ($M = 3.73$), video posts ($M = 3.63$), alumni interviews ($M = 3.52$), and the least relevant employment interviews ($M = 3.52$).

Table 17*Social Media Relevance as Perceived by First-year and First-year Transfer College of Agriculture Students*

Relevance Questions	<i>M</i>	<i>SD</i>
As a student, the pictures the College of Agriculture post on social media are relevant to me.	3.75	0.91
As a student, the students interviews the College of Agriculture post on social media are relevant to me.	3.73	0.86
As a student, the College of Agriculture social media posts are relevant to me.	3.72	0.97
As a student, the videos the College of Agriculture post on social media are relevant to me.	3.63	0.92
As a student, the alumni interviews the College of Agriculture post on social media are relevant to me.	3.53	0.98
As a student, the employment interviews the College of Agriculture post on social media are relevant to me.	3.52	0.98

Note. Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5=Strongly Agree.

Social Media Engagement

Participants were asked to rate statements relating to their perception of their engagement with their College of Agriculture’s social media using the following scale: strongly agree (5), agree (4), neither agree nor disagree (3), disagree (2), and strongly disagree (1). Results, shown in Table 18, indicate that respondents perceive social media posts should reflect their needs as students the most ($M = 4.12$). Participants with a mean of 3.62 perceive that the College of Agriculture’s social media encourages them to follow the College of Agriculture social media accounts. On average participants neither agree nor disagree ($M = 3.32$) when asked if they perceive the social media of their College of Agriculture to be an important part of their college experience. Looking at specific social media engagement activities show participants are slightly inclined to “like” social media posts ($M = 3.53$) by their College of Agriculture. They do engage in “liking” more than any other engagement activity related to social media and the College of

Agriculture. Respondents tend to disagree meaning that they do not participate in the engagement of the following posts of their College of Agriculture: share or retweet ($M = 2.82$), hashtagging ($M = 2.37$), and posting a comment ($M = 2.22$) on posts from their College of Agriculture. Standard deviation scores showed a higher degree of variability at the following: I often share or retweet social media posts of my College of Agriculture ($SD = 1.17$), I often hashtag social media posts that relate to the College of Agriculture ($SD = 1.16$), and I often “like” social media posts by the College of Agriculture ($SD = 1.14$).

Table 18

Social Media Engagement as Perceived by First-year and First-year Transfer College of Agriculture Students

Engagement Questions	<i>M</i>	<i>SD</i>
The College of Agriculture’s social media should reflect the needs of current students.	4.12	0.783
The College of Agriculture’s social media encourages me to follow their account.	3.62	1.027
I often “like” social media posts by the College of Agriculture.	3.53	1.142
The College of Agriculture’s social media is an important part of my college experience.	3.32	1.181
I often share or retweet social media posts by the College of Agriculture.	2.82	1.172
I often hashtag social media posts that relate to the College of Agriculture.	2.37	1.158
I often post a comment on social media posts by the College of Agriculture.	2.22	0.993

Note. Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5 = Strongly Agree.

Social Media Connectedness

Respondents were requested to rate statements concerning their perception of their connectedness as a result of their College of Agriculture’s social media efforts using the following scale: strongly agree (5), agree (4), neither agree nor disagree (3), disagree (2), and strongly disagree (1). Results in Table 19 show the highest mean that students tend to agree with the statement they feel welcomed by the social media of their College ($M = 3.97$). Participants

were also inclined to agree they feel as though a sense of family is evident through the social media of their College ($M = 3.70$). When specifically asked, students to rank their perception of their connectedness to the College of Agriculture due to the social media efforts they tended to slightly agree ($M = 3.53$). Participants tended to neither agree nor disagree when asked they felt informed as a first-year student by the social media of the College of Agriculture ($M = 3.48$), the felt they would fit into the family as of the College of Agriculture because of their social media ($M = 3.48$), and social media of their College helped to reduce their first-year student anxiety levels ($M = 3.03$).

Table 19

Social Media's Influence on Connectedness to the College of Agriculture as Perceived by First-year and First-year Transfer College of Agriculture Students

Connectedness Questions	<i>M</i>	<i>SD</i>
I feel welcomed as a student by the social media of the College of Agriculture.	3.97	0.90
The sense of family is evident through the social media of the College of Agriculture.	3.70	1.01
My connectedness to the college is enhanced through the social media if the College of Agriculture.	3.53	1.10
I can interact with others through social media of the College of Agriculture.	3.52	1.05
I felt informed as a first-year student by the social media of the College of Agriculture.	3.48	0.98
I felt as though I would fit into the family of the College of Agriculture because of their social media.	3.48	1.05
The decision to remain within the college was strengthened through the social media of the College of Agriculture.	3.18	1.11
My first-year student anxiety was reduced by the social media of the College of Agriculture.	3.03	0.10

Note. Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5=Strongly Agree.

Participants were asked to rate statements relating to social media platforms, content, relevance, engagement, and connectedness of their College of Agriculture based on their perceptions using the following scale: strongly agree (5), agree (4), neither agree nor disagree

(3), disagree (2), and strongly disagree (1). As indicated in Table 20, there is a summary of average scores in each of the areas within the study. Respondents more strongly agreed with statements regarding the social media content of the College of Agriculture more than another other area ($M = 4.73$). Participant selections in the area of relevance ($M = 3.67$) averaged second highest. The third highest rating average was that it helped them to feel connected ($M = 3.59$), and student engagement ($M = 3.136$) was perceived the lowest.

Table 20

Grand means of Student Perceptions of Social Media Areas

Social Media Area	<i>M</i>	<i>SD</i>
Content	4.73	0.78
Relevance	3.67	0.76
Connectedness	3.59	0.76
Engagement	3.14	0.76

Note. Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5=Strongly Agree.

The bivariate statistic Pearson product-moment correlation was conducted between dependent variables of social media content, relevance, engagement, and connectedness with the perceptions of post-secondary first-year and first-year transfer College of Agriculture students. The strength and direction of relatedness between continuous variables is determined by the Pearson product-moment correlation coefficient (Ross & Shannon, 2008). A perfect correlation is either $r = +1$ or $r = -1$ according to Ross & Shannon (2016). The closer to either -1 or +1, the stronger the correlation and greater the effect. The significance level used to determine correlations was $p < .05$. The following Table 21 will examine correlations between social media content, relevance, engagement, and connectedness.

As shown in Table 21, the strongest correlation was a positive, substantially significant increasing linear relationship between engagement and connectedness ($r = 0.68, p < .01$).

Relevance and connectedness ($r = 0.59, p < .01$), relevance and engagement ($r = 0.55, p < .01$), and content and engagement ($r = 0.51, p < .01$) also showed there to be positive, substantially significant increasing linear correlations. Significant, moderate correlations existed between content and connectedness ($r = 0.41, p < .01$) and between content and relevance ($r = 0.34, p < .01$). Each of the areas of social media were analyzed using an average of their interval measurement score.

Table 21

Correlations Between Social Media Areas

Social Media Area	Connectedness	Engagement	Relevance	Content
Content	0.41**	0.51**	0.34**	1
Relevance	0.59**	0.55**	1	
Engagement	0.68**	1		
Connectedness	1			

*Note. *Correlation is significant at the 0.05 level (2-tailed); ** Correlation is significant at the 0.01 level (2-tailed). Magnitude: .01 \geq r \geq .09 = Negligible, .10 \geq r \geq .29 = Low, .30 \geq r \geq .49 = Moderate, .50 \geq r \geq .69 = Substantial, r \geq .70 = Very Strong (Davis, 1971).*

To determine if statistical differences were present between two groups of participants and social media areas (content, relevance, engagement, and connectedness) independent t-tests were calculated. The significance level used to determine differences in means was $p < .05$. Groups were broken down into low and high access frequency. Participants accessing social media ten times or less per day were grouped as low use ($N = 37$). Participants accessing social media eleven or more times per day were grouped as high use ($N = 23$). Results from the independent samples t-test, Table 22, showed that there were no differences between the two groups were statistically significant in regard to social media content, relevance, engagement, and connectedness. Meaning that participants who access social media less frequently do not

perceive any differences in their College of Agriculture’s social media than those participants who access social media at a higher frequency.

Table 22

T-Test Low and High Social Media Access Frequency According to the Social Media Areas of Content, Relevance, Engagement, and Connectedness

Area	Frequency of Access	<i>M</i>	<i>SD</i>	<i>t-value</i>	<i>p-value</i>
Content	Low	4.69	.88	-.57	.57
	High	4.81	.56		
Relevance	Low	3.57	.78	-.99	.33
	High	3.78	.77		
Engagement	Low	3.15	.85	.04	.97
	High	3.14	.60		
Connectedness	Low	3.59	.74	.10	.92
	High	3.57	.79		

Note. p < .05

Summary of Findings

Chapter IV presented the findings of the study based on the three research objectives that guided the study. This study’s research objectives were: (1) Identify personal and academic characteristics of the target population, (2) Identify social media platforms and other communication channels of the Colleges of Agriculture used by students, and (3) Describe the effectiveness of social media on student communication, retention, and occupational resources within the College of Agriculture. The findings of this study indicate that Colleges of Agriculture are expected by their students to have a presence on social media but Colleges of Agriculture do not currently have a significant presence on the platforms they most often use. It was found that digital communication methods are preferred channels of communication for respondents. Substantial, significant correlations existed between students finding content relevant in order for engagement and connectedness to occur with the social media of Colleges of Agriculture. The overall findings of this study indicate the need for Colleges of Agriculture admission offices to

use surveys such as this to make informed decisions in how to allocate time, effort, and other resources to best meet their current and prospective students' needs on social media.

CHAPTER IV: SUMMARY, CONCLUSIONS, and RECOMMENDATIONS

Summary

The purpose of this study was to determine first-year and first-year transfer student perceptions and effectiveness of social media influence in Southeastern Land-Grant Universities Colleges of Agriculture. The intent is to describe College of Agriculture first-year and first-year transfer student perceptions of their College of Agriculture's social media platforms as communication, retention, and occupational resource. Only minimal research has addressed the recruitment and retention of university students majoring in agriculture field of study (Rayfield et al., 2013). Existing research involving recruitment and retention of students has shown that reaching generation Z should be individually targeted and designed strategically for them individually (Baker et al., 2013). Researchers Fry & Parker (2018) describe Generation Z as the most educated, racially, and ethnically diverse generation thus far. To connect with current and potential students, universities need instruments to collect data on what social media platforms are most used, which types of posts are most effective, and what perceptions students have of the image that is being created of the college on social media. The influence of smartphones, websites, and social media platforms such as Instagram, Facebook, and Snapchat must be considered as a viable influence on the decisions of students today. Communication currently is largely dependent on social media as a vehicle for the timely, efficient, and cost-effective dispersal of information (Beattie et al., 2019).

Colleges of Agriculture use various social media platforms to interact with current and prospective students without understanding how effective or ineffective those efforts are. Administrators need a way to show their marketing efforts that are being allocated toward social media are effectively reaching their target audience with their intended outcome. Academic

literature offers little assistance to administrators for implementing social media into their marketing plans (Mangold & Faulds, 2009).

Objectives

1. Identify personal and academic characteristics of the target population.
2. Identify social media platforms and other communication channels of the Colleges of Agriculture used by students.
3. Describe the effectiveness of social media on student communication, retention, and occupational resources within the College of Agriculture.

Study Design and Procedures

This study used a quantitative non-experimental survey research design. The instrument was developed using material gathered from the literature review in Chapter 2. The instrument created for this study contained 44 questions and was divided into two sections: questions regarding social media (35 questions), and student characteristics (9 questions). Items were further divided into five areas concerning social media: social media usage, social media content, social media relevance, social media engagement, and social media connectedness. The instrument was created using Qualtrics, an online questionnaire, and distributed through e-mail by participants' own Colleges of Agriculture during April and May of 2020. This study's target population included first-year and first-year transfer post-secondary students enrolled in public Southeastern Land-Grant University Colleges of Agriculture. The instrument was sent to ($N = 574$) possible respondents, yielding ($n = 60$) usable survey responses. Colleges of Agriculture from four differing states in the Southeastern United States participated in this study: CU, LSU, UF, and UGA-Tifton. Collected data was analyzed and reported using the statistical methods

means, standard deviations, frequencies, percentages, Pearson product-moment correlation, and independent t-tests. Data were coded and analyzed using SPSS Version 26.

Major Findings

Research Objective 1: Identify personal and academic characteristics of the target population.

Females comprised the majority of respondents, 47 out of 60, of this study. This is consistent with data from numerous Southeastern Land-Grant Public University Colleges of Agriculture. AU, CU, LSU, and UGA among others all have a higher percentage of females enrolled in their Colleges of Agriculture than males. Ethnicity of respondents was predominately white, 18 to 24 years of age, first-year, animal science majors. Participants' hometown was more evenly distributed between large town, rural area or small town, large city, and a farm or ranch. This is consistent with the research of researchers Rayfield et al. (2013) who reported the majority of students are coming from non-agricultural backgrounds.

Research Objective 2: Identify social media platforms and other communication channels of the Colleges of Agriculture used by students.

Social Media: Overwhelmingly this generation of students prefers Snapchat and Instagram over any other social media platforms. This coincides with previous research conducted (Perrin & Anderson, 2019; Smith & Anderson, 2018). When asked which social media platform they used most often 50 percent of participants choose Snapchat and 31.7 percent chose Instagram.

Next, participants were asked which social media platforms they used without taking frequency consideration; only if the platform was used or not used by the participant. Respondents' answers revealed the top two social media platforms choices were Instagram (95%) then Snapchat (91.7%). These findings are consistent with previous research (Perrin &

Anderson, 2019; Smith & Anderson, 2018). Other social media choices of participants are as follows in descending order: YouTube (80%), Facebook (71.7%), Twitter (48.3%), Pinterest (45%), LinkedIn (18.3%), and lastly Flickr (1.7%). Again, coinciding with previous research that shows that overall younger Americans are using a variety of platforms (Smith & Anderson, 2018).

To further see which social media platforms were frequently used by our target population, participants were asked to select the top three social media platforms they use. Overwhelmingly again, Snapchat (86.7%) and Instagram (81.7%) were more frequently selected by participants. Other social media platforms were well below in use: YouTube (40%), Facebook (38.3%), Twitter (35%), Pinterest (8.3%), LinkedIn (3.3%), and Flickr (0%).

Though students are using a variety of social media platforms, it does not assure that they are following their College of Agriculture. Following or “liking” an account on social media means that you will see notifications and posts that fall into your feed, making you aware of activity on a followed account. This is important to Colleges of Agriculture so that students can further connect to them and become more engaged. Participants were asked to indicate on which social media platforms that they “follow” or “like” their College of Agriculture. The results from which platforms they follow their College of Agriculture were much different than the platforms the participants choose they use most often. No respondents reported they follow their College of Agriculture on Snapchat yet it was selected as one of the top three social media sites selected by participants. These results correspond to Barnes and Jacobsen’s (2012) research showing usage of social media does not equate with perceived effectiveness of social media. If Colleges of Agriculture are present on Snapchat, they are not successful in garnering a following of their

students. Snapchat would be an optimum place to communicate and make connections with their students that is not currently being utilized effectively.

Colleges of Agriculture are followed by 60 percent of respondents on Instagram, which is cited as one of the top three platforms participants use (Perrin & Anderson, 2019; Smith & Anderson, 2018). College of Agriculture Facebook followers were reported to be 41.7 percent, but only 11.7 percent of respondents report to use Facebook most often. This means that while respondents do have an account on Facebook and follow their College of Agriculture on the platform, it is not a platform they use often. Posts placed on Facebook by Colleges of Agriculture are less likely to be seen on this platform than if those posts were placed on Instagram or Snapchat instead. With the majority of participants (76.7%) expecting their College to have a presence on social media, Colleges of Agriculture are falling short of meeting their students on their preferred social media platform; Snapchat. The independent t-tests between social media low access frequency and high access frequency revealed no significant differences existed between any of the social media areas of content, relevance, engagement, or connectedness.

Communication Methods: To understand which communication methods used by Colleges of Agriculture were effective in reaching students, participants were asked to select which various communication methods effectively reached them. Digital communication, whether email or social media, are two of the three highest forms of communication that were used to reach the participants. Further pointing to this generation as very receptive to digital technology and mirroring past research showing students usage and interaction with technology daily as one of their preferred channels of communication (Rayfield et al., 2013). Participants selected email as the number one mode of communication (96.7%), class communication (76.7%), social media (53.3%), printed materials (51.7%), personal contact with other students

(48.3%), personal contact with professors (45.0%), website (43.3%), and lastly club meetings (31.7%) in the frequency selected.

Research Objective 3: Describe the effectiveness of social media on student communication, retention, and occupational resources within the College of Agriculture.

Social Media Content

Participants perceived the variety of social media content posted by their College of Agriculture to be appropriate and their posts to be informative. Participants want their College to post slightly more frequently. Participants answered they agreed when asked if posts informed them of potential careers and possible internships. These two types of posts ranked within the top three of types of posts students chose enjoy seeing. For Colleges of Agriculture this means that posting about potential careers and possible internships would be topics to place more their social media efforts on.

The variety of posts were deemed appropriate by respondents but this did not consider what types of posts students most enjoyed or the types of posts they actually see posted by their College. When asked, participants most enjoyed posts related to upcoming events of their College, available internships, and available careers the most. In contrast, posts commonly seen by participants when asked in the study were news about their College, upcoming events of their College, student spotlights, and alumni spotlights. Comparing the scores between what was enjoyed and what was commonly seen by students revealed the greatest difference between available careers, fun facts, and available internships. Concluding that Colleges of Agriculture should put a greater effort in posting what students enjoy seeing on their social media accounts rather than their current types of posts.

Social Media Relevance

Overall participants perceive the relevance of social media posts made by their College to be slightly relevant to them. Respondents perceived pictures and student interviews to be the most relevant posts when asked, while student and alumni interviews were perceived as the least relevant. Students perceiving interviews of employment and alumni as least relevant, which would mirror the data previously, discussed showing alumni spotlights to not be as enjoyable as other types of posts by their College of Agriculture. Colleges should persist with these spotlight posts but strive to highlight information that their students find enjoyable such as discussing internships, careers, and majors. Within the spotlight, posts there are opportunities for students to garner the information they desire from the College's posts. Pairing a post with an image or fun fact that catches their students' attention will further their connection and relevance yielding potential social media engagement among their followers. Alumni spotlights highlighting which internships they participated in while at the College would offer material students ranked as enjoyable; giving them more of what they want to see.

There was a substantially significant relationship between relevance and engagement and relevance and connectedness. If a student finds something to be of relevance to them, they will connect with it more and in turn will be more engaged. If Colleges of Agriculture can create social media posts that are more relevant to their students, students' perception of connectedness and engagement will also increase.

Social Media Engagement

Participants were only moderately engaged with the College of Agriculture's social media in regard to liking posts by their College. Participants were not engaged in sharing, hashtagging, and commenting on posts. Further study should be done to see if this is a common practice to not engage among other accounts they follow or if it is just indicative of their lack of engagement with their College's social media.

When participants were asked if social media of the College of Agriculture played an important part of their college experience on average most selected neither agree or disagree. There was a higher degree of variability in the standard deviation. This is indicative of the substantial, significant correlation between engagement and connectedness. If a student does not feel connected to the social media of their College of Agriculture, they will not engage with it and will not feel it is an important part of their college experience. There were also substantial, significant correlations between engagement and relevance and between engagement and content. Data shows that most College of Agriculture social media account followers are mere spectators rather than participants actively engaging with the social aspect of their College's social media.

Social Media Connectedness

Overall participants perceived a feeling of being welcomed and a sense of family from the social media of their College of Agriculture. All questions from this section on social media connectedness scored higher than a mean of three. This positive central tendency leads it to be concluded that students perceive an overall feeling of enhanced connectedness to their College of Agriculture due in part to the efforts of their College of Agriculture on social media. The more connected a student feels to their College of Agriculture the more engaged they will be.

Substantial, significant relationships existed between connectedness with engagement and relevance.

When asked if the decision to remain within the college was strengthened through the social media of the College of Agriculture respondents neither agreed nor disagreed. This means that even though they perceive to feel more welcomed due to social media they do not perceive that feeling affects their decision to remain a student within the College of Agriculture.

Conclusions

The following conclusions are supported by the major findings of the study that were presented above. The majority of participants (76.7%) expect their College of Agriculture to have a presence on social media. If Colleges of Agriculture are not active on the social media platforms students will not see their presence and therefore will not be connected or engaged with the social media of their College of Agriculture. They must use the social media platforms their students prefer such as Snapchat and Instagram.

Snapchat was the preferred social media platform of the respondents, but it was not selected as a social media platform in which they follow their College of Agriculture. If Colleges of Agriculture truly are to meet their students where they are, they must be present on Snapchat. Students are spending time in other social media platforms but not to the degree that are in Snapchat. Instagram was also heavily used by respondents. Colleges of Agriculture do have a presence on this platform; as 60 percent of respondents follow their College on Instagram. Efforts should be continued and expanded on this social media platform. Colleges of Agriculture are connecting with their students via Facebook and should continue their efforts on this platform. Facebook was not participants preferred social media platform, Colleges of Agriculture should not assume that students will see their posts in a timely manner. Snapchat or Instagram

would be a more likely platform to connect with students quickly through social media as they use those platforms at a greater frequency than Facebook.

Colleges cannot assume just because students use social media and follow them on a certain platform that they are actively engaged with the College's social media. While respondents followed their College, they were not necessarily engaged. Data from this study show that to be true. There were significant correlations between content, engagement, connectedness, and relevance that Colleges of Agriculture must keep in mind as they craft social media posts. Baker et al. (2013) reported reaching the target audience via social media should be individually targeted, cleverly tailored, and strategically placed to meet students where they are. Engagement and connectedness revealed the strongest correlation denoting that one will lead to another. Content and engagement held a substantial, significant correlation implying that if students connect with the content they will be more engaged. Relevance is crucial in regards to content as well. As students find the content of the social media more relevant to themselves their connectedness and engagement with the social media of the College of Agriculture will correspondingly increase additionally.

Posting on various social media platforms in unison would increase the opportunity for College of Agriculture posts to be noticed. Posts should be modified slightly from one platform to another depending on the platform. For instance, Snapchat, and Instagram are mostly images, Facebook can be a combination of text and images, while Twitter is generally text.

Participants indicated their College of Agriculture posts on social media were adequate in the frequency posted. Nevertheless, the types of posts that Colleges of Agriculture are currently posting differed with what participants enjoy seeing. Colleges should put a greater effort in posting what their students are interested in seeing in order to gain their attention. Participants

reported they most enjoy posts relating to upcoming events of their College, available internships, and available careers. While this was not the type of posts participants most commonly reported seeing. This disconnect of what students enjoy seeing and what they are actually observing may be due to their College of Agriculture not taking into account their students' preferences. This is why a questionnaire such as this is recommended. It is also plausible that students are not observing College of Agriculture posts enough to see the variety of posts shown by their College. It is concluded that Colleges of Agriculture should focus more of their marketing efforts on posts related to those topics that students reported to enjoy seeing.

Participants find pictures and student interviews to be the most relevant when asked. With this data in mind, Colleges of Agriculture can tailor their social media posts to garner students' attention. Once there, administrators should take care in crafting the information they wish to convey in way that it is relevant to their audience. Their audience is most interested in events, internships, and careers. With posts targeted and specifically tailored using pictures, video, interviews, and/or text, participants will find posts to be more relevant to their needs and interests yielding them to also feel more connected to their College of Agriculture. Using individuals and places from the College instead of stock images will also give posts a deeper feeling of authenticity. Relevant focused content is essential to students connecting and engaging with the social media of the College of Agriculture.

The data showed College of Agriculture students are spectators on their College's social media rather than active participants. Administrators need to find ways to engage their audience other than "liking" a post. Activities such as sharing posts from the College, "hashtagging," and commenting on post should be encouraged. The more connected through social media the College of Agriculture can cause their students to feel, the more likely students are to engage.

Focusing on crafting the content to be relevant to their audience should be a primary focus of social media marketing efforts.

Colleges of Agriculture have to be current on trending platforms in order to be effective on social media. Preference of social media platforms is fluid and administrators need to be aware of when it is time to adopt a new platform into their marketing plan and phase out another. Tik Tok is the newest trending social media platform for making and sharing short continuous looping videos. In the United States, slightly over 12.9 percent of individuals ages 18 to 24 years old are using Tik Tok (Marketing Charts, 2019). Colleges of Agriculture have not yet garnered the attention of their students on Snapchat, let alone are prepared to embrace an entirely new social media platform such as Tik Tok. They must realize the world of social media is fluctuating; students' social media usage and their preferences will change as the trends change. Colleges of Agriculture must do the same.

Recommendations

The results of this study will assist Southeastern Land-Grant Colleges of Agriculture in adapting and expanding their current social media efforts to better reach their students. The following recommendations were made based on the researcher's findings and conclusions from the study. Recommendations are specific to Colleges of Agriculture, nevertheless, other institutions could benefit from the findings and suggestions as well. Further research related to this study could be conducted in a number of areas based on the findings, conclusions, and implications of the study. The researcher presents the following recommendations for future research.

The majority of Colleges of Agriculture students within this study expected their College to have a presence on social media. Many students are not connecting with their College on social

media due to their inactivity on the platforms that Colleges of Agriculture are using. The majority of students are spending time on Snapchat and Instagram. Further study should be conducted to assess if a strong presence on these platforms would increase engagement and connectedness with the College of Agriculture.

Conversely, further study should be done to ascertain if it is a common practice for students to not engage with social media accounts they follow or is the lack of engagement just with their College of Agriculture's social media. Many students use social media to pass time and not as a form of engagement. Understanding students' motives in using social media would help to further define the role of Colleges of Agriculture's social media. Further study should also include if students choose certain social media platforms at specific times for certain activities or intentions. As well as if there are differences in social media platform usage among low versus high frequencies users; meaning that those who are not as active on social media chose different platforms than those that are more active.

Student retention and recruitment is vital to training our future workforce in the Agriculture sectors. This study asks students if they plan to remain a student within the College of Agriculture and if social media has influenced that decision. It does not however seek information regarding the influence of social media on their initial enrollment. A future study could be conducted to determine what effect Colleges of Agriculture's social media had on potential, current, and past enrollment within the College.

In regards to enrollment of Colleges of Agriculture, this study sought to describe the content of social media that participants found enjoyable and relevant. As a student progresses through college life what they find enjoyable and relevant would also evolve. This study only considered the perspectives of first-year and first-year transfer College of Agriculture students, future

research should be conducted with all levels of students within the Colleges of Agriculture to understand the difference and similarities between freshmen, sophomores, juniors, seniors, and graduate students and their perceptions of the social media of their College of Agriculture.

Participants of this study were mostly female. Overall, this is reflective of the enrollment within many Southeastern Public Land-Grant Colleges of Agriculture who boast a higher female population. Future research should be conducted with more equally spread gender groups to see differences and similarities when comparing male to female participants regarding social media of Colleges of Agriculture.

By effectively using social media platforms Colleges of Agriculture will be able to communicate, connect, and engage with students. As technology changes institutions must seek communication channels that their students are using in order to open, continue, and increase communication with their students. With the majority of students using social media, adapting marketing strategies of Colleges of Agriculture need to include social media as a tool to effectively reach their students.

References:

- Adedokun, O. A., & Balschweid, M. A. (2008). Investigating community factors as predictors of rural 11th-grade agricultural science students' choice of careers in agriculture. *Journal of Agricultural Education*, 49(4), 1-10. <https://doi.org/10.5032/jae.2008.04001>
- Baker, K. (2020). Twitter marketing in 2020: The ultimate guide. *Hubspot*.
<https://blog.hubspot.com/blog/tabid/6307/bid/25084/the-ultimate-cheat-sheet-for-expert-twitter-marketing.aspx>
- Baker, L. M., Settle, Q., Chiarelli, C., & Irani, T. (2013). Recruiting strategically: Increasing enrollment in academic programs of agriculture. *Journal of Agricultural Education*, 54(3), 54-66. <https://doi.org/10.5032/jae.2013.03054>
- Barbee, B. (2018, February 18). *Are you #stoked or #overit? The complete guide to hashtags on social media*. Digital Trends. <https://www.digitaltrends.com/social-media/what-is-a-hashtag/>
- Barnes, N. G., & Jacobsen, S. L. (2012). *2012 Missing link in social media use among top MBA programs: Tracking prospects*. University of Massachusetts-Dartmouth Center for Marketing Research. <https://www.umassd.edu/cmr/research/social-media-research/>
- Barnes, N.G., & Jacobsen, S. L. (2013). Fish where the fish are: Higher-ed embraces new communications tools to recruit the wired generation. *Journal of Higher Education Theory and Practice*, 13(3/4) 11-21.
- Barnes, N. G., & Lescault, A. M. (2011). *Social media soars as higher-ed experiments and reevaluates its use of new communications tools*. <file:///E:/Dissertation/Articles/Social%20Media%20Adoption%20Soars%20as%20Higher-Ed%20Experiements%20....pdf>

- Barnes, N.G., & Lescault, A.M. (2013). *College presidents out-blog and out-tweet corporate ceo's as higher ed delves deeper into social media to recruit students*. University of Massachusetts-Dartmouth Center for Marketing Research. <https://www.umassd.edu/cmr/research/social-media-research/>
- Barnes, N. G., & Mattson, E. (2010). *Social media and college admissions: The First longitudinal study*. University of Massachusetts–Dartmouth Center for Marketing Research. <https://www.umassd.edu/cmr/>
- Beattie, P. N., Lamm, A. J., Bunch, J. C., & Lundy, L. K., (2019). Communicating with 4-h stakeholders: Examining social media use in rural and urban programs. *Journal of Agricultural Education*, 60(1), 202-223. <https://doi.org/10.5032/jae.2019.01202>
- Blackshaw, P. & Nazzaro, M. (2004). Consumer-generated media (CGM) 101: Word-of-mouth in the age of the web-fortified consumer (2nd ed.). *A Nielsen Buzz Metrics White Paper*.
- Blystone, D. (2019, May 19). *The Story of Instagram: The Rise of the #1 Photo-Shaping App*. Investopedia. <https://www.investopedia.com/articles/investing/102615/story-instagram-rise-1-photo0sharing-app.asp>
- Bouse, J. (2016) New technology and communications tools. *College and University*, 91(2), 41-52.
- Boyd, D. M. & Ellison, N. B. (2007, December 17). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230. <https://doi.org/10.1111/j.1083-6101.2007.00393.x>
- Cambridge Dictionary. (n.d.). Cambridge Dictionary.org dictionary. Retrieved May 7, 2020 from <https://dictionary.cambridge.org>

- Campbell, D. T. & Stanley, J. C. (1973). *Experimental and quazi-experimental designs for research*. Ran McNally.
- Clinedinst, M. & Koranteng, A. M. (2017). *State of college admissions*. National Association for College Admission Counseling.
<http://www.nacacnet.org/globalassets/documents/publications/research/soca17final.pdf>
- Creswell, J. W. (1994). *Research Design: Qualitative and Quantitative Approaches*. Thousand Oaks.
- Creswell, J. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (3rd ed.)*. Thousand Oaks.
- Davis, J. A. (1971). *Elementary Survey Analysis*. Prentice Hall.
- DeAndrea, D. C., Ellison, N. B., LaRose, R., Steinfield, C., & Fiore, A. (2012, January) Serious social media: On the use of social media for improving students' adjustment to college. *The Internet and Higher Education*, 15(1), 15-23.
<https://doi.org/10.1016/j.iheduc.2011.05.009>
- Dijck, J.V. (2013). *A culture of connectivity; A critical history of social media*. Oxford University Press.
- Dillman, D. A., Smyth, J.D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method*. John Wiley & Sons.
- Dimock, M. (2019, January 17). *Defining generations: Where millennials end and generation Z begins*. Pew Research Center. <https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/>

- Edosomwan, S. Prakasan, K., Kouame, D., Watson, J., Seymour, T. (2011). History of social media and its impact on business. *The Journal of Applied Management and Entrepreneurship*, 16(3). <http://www.minot.com/tom/SocialMedia.pdf>
- Elliot, J. (2019, July). *Using snapchat to connect with generation z and millennials*. Parks and Recreation. National Recreation & Park Association. <https://www.nrpa.org/parks-recreation-magazine/2019/july/using-snapchat-to-connect-with-generation-z-and-millennials/>
- Esters, L. T., & Bowen, B. E. (2005). Factors influencing career choices of urban agricultural education students. *Journal of Agricultural Education*, 46(2), 24-35. <https://doi.org/10.5032/jae.2005.02024>
- Facebook (n.d.). *Company information*. Facebook. Retrieved April 20, 2020, from <https://about.fb.com/company-info/>
- Fosnacht, K., Sarraf, S., Howe, E., & Peck, L. K., (2017, Winter). How important are high response rates for college surveys? *The Review of Higher Education*, 40(2), 245-265. <https://doi:10.1353/rhe.2017.0003>.
- Fry, R. & Parker, K. (2018, November 15). *Early benchmarks show 'post-millennials' on track to be the most diverse, best-educated generation yet*. Pew Research Center. <https://www.pewsocialtrends.org/2018/11/15/early-benchmarks-show-post-millennials-on-track-to-be-most-diverse-best-educated-generation-yet/>
- Getty, J. (2015). Making content count: How content marketing can impact colleges' recruitment of undergraduate students [Doctoral dissertation, Hamline University]. https://digitalcommons.hamline.edu/cgi/viewcontent.cgi?article=1182&context=hse_all

- Gil, P. (2020, April 04). *What is twitter? And how does it work?* Lifewire.
<https://www.lifewire.com/what-exactly-is-twitter-2483331>
- Gliem, J. & Gliem, R. R. (2003, October 8-10). *Calculating, interpreting and reporting Cronbach's alpha reliability coefficient for liker-type scales* [Paper presentation]. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, Columbus, OH, United States.
- Goecker, A. D., Smith, E., Fernandez, J. M., Ali, R., & Theller, R. G. (2015). *Employment opportunities for college graduates in food, agriculture, renewable natural resources, and the environment*. United States Department of Agriculture. Retrieved October 9, 2020, from <https://www.purdue.edu/usda/employment/>
- Gregory, D. (2018). *The development of an instrument to assess students' perceptions of quality of social media practices during the admissions cycle*. (Publication No. kent1521575369024608) [Doctoral dissertation, Kent State University]. Ohio Link, Electronic These & Dissertations Center.
- Johnson, D. (2019, September 6). *'What is LinkedIn?': A beginner's guide to the popular professional networking and career development site*. Business Insider.
<https://www.businessinsider.com/what-is-linkedin>
- Katz, E., Haas, H., & Gurevitch, M. (1973, April). On the use of the mass media for important things. *American Sociological Review*, 38(2) 164-181. <https://doi.org/10.2307/2094393>
- Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509-524. <https://doi.org/10.1002/9781118841570.iejs0032>

- Kessler, S. (2011, October 17). *7 Ways universities are using Facebook as a marketing tool*. Masable. <https://mashable.com/2011/10/17/facebook-marketing-colleges-universities/>
- Kitchen, P. J. & Burgmann, I. (2010, December 15) Integrated marketing communications. *Wiley International Encyclopedia of Marketing*.
<https://doi.org/10.1002/9781444316568.wiem04001>
- Ko, H., (2000, August 9-12). *Internet uses and gratifications: Understanding motivations for using the internet* [Paper presentation]. Mass Communication and Society Division 83rd Annual Meeting, Phoenix, AZ, United States.
- Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). *Handling nonresponse in social science research*. *Journal of Agricultural Education*, 42(4), 43-53. <https://doi.10.5032/jae.2001.04043>
- Liu, X., Min, Q. & Han, S. (2019, April 12). Understanding users' continuous content contribution behaviours on microblogs: an integrated perspective of uses and gratification theory and social influence theory. *Behaviour & Information Technology*, 39(5), 525-543. <https://doi.org/10.1080/0144929X.2019.1603326>
- Mangold, W. G. & Faulds, D. J. (2009). Social media. The new hybrid element of the promotion mix. *Business Horizons*, 52(4), 357-365. <https://doi.org/10.1016/j.bushor.2009.03.002>
- Marketing Charts. (2019, May 6). TikTok: How fast is it growing in US and who is using it? <https://www.marketingcharts.com/digital/social-media-108342>
- Merriam-Webster. (n.d.) *Merriam-Webster.com* dictionary. Retrieved April 14, 2020 from <https://www.merriam-webster.com/>
- Moreau, E. (2020, April 14). *What is Instagram and Why Should You Be Using It?* Lifewire. <https://www.lifewire.com/what-is-instagram-3486316>

- Nations, D. (2020, April 14). *What is social media?* Lifewire.
<https://www.lifewire.com/what-is-social-media-explaining-the-big-trend-3486616>
- National Survey of Student Engagement (2016, December 12). NSSE Response Rate FAQ.
Retrieved from http://nsse.indiana.edu/pdf/Resp_Rate_FAQ.pdf
- Patel, N. (2015, August 12). *The Psychology of Liking on Facebook*. Marketing Land.
<https://marketingland.com/psychology-liking-facebook-135599>
- Paterson, J. (2019, Summer). Here they come... Generation Z. *Journal of College Admission*, 244, 26-30.
- Perrin, A. & Anderson, M. (2019, April 10). *Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018*. Pew Research Center.
<https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/>
- Pinterest, (n.d.) *All about Pinterest*. Pinterst. Retrieved May 7, 2020 from
<https://help.pinterest.com/en/guide/all-about-pinterest>
- Quan-Hasse, A. & Young, A. L. (2010). Uses and gratifications of Social Media: A comparison of Facebook and instant messaging. *Bulletin of Science, Technology & Society*, 30(5) 350-361. <https://doi.org/10.1177/0270467610380009>
- Rayfield, J., Murphrey, T. P., Skaggs, C., & Shafer, J. (2013). Factors that influence student decisions to enroll in a college of agriculture and life sciences. *NACTA Journal*, 57(1), 88-93. <https://www.nactateachers.org/index.php/volume-57-num-1-march-2013/2033-factors-that-influence-student-decisions-to-enroll-in-a-college-of-agriculture-and-life-sciences>

- Roberts, T. G., Harder, A., & Brashears, M. T. (2016). *American Association for Agricultural Education national research agenda: 2016-2020*. Gainesville, FL: Department of Agricultural Education and Communication.
- Rocca, S. J. (2013). Comparison of factors influencing the college choice of matriculant and non-matriculant students into a college of agriculture. *NACTA Journal*, 57(2), 72-78.
<https://www.nactateachers.org/index.php/volume-57-num-2-june-2013/2068-comparison-of-factors-influencing-the-college-choice-of-matriculant-and-non-matriculant-students-into-a-college-of-agriculture>
- Ross, M. E. & Shannon, D. M. (2016). *Handbook on applied quantitative methods in education* (2nd ed.). Kendall Hunt.
- Safko, L. (2012). *The social media bible: Tactics, tools and strategies for business success*. (3rd ed.). Wiley.
- Smith, A. & Anderson, M. (2018, March 1). *Social Media Use in 2018*. Pew Research Center.
<https://www.pewresearch.org/internet/2018/03/01/social-media-use-in-2018/>
- Turner, M. L. (2017, Fall). Like, Love, Delete: Social Media's Influence on College Choice. *Journal of College Admission*, 237, 31-33.
- Thieman, E. B., Rosch, D. M., & Suarez, C. E. (2016). Consideration of agricultural education as a career: A statewide examination by high school class year of predicting factors. *Journal of Agricultural Education*, 57(4), 29-43. <https://doi.org/10.5032/jae.2016.04029>
- YouTube. (n.d.). *About*. YouTube. Retrieved April 20, 2020 from
<https://www.youtube.com/about/>
- Wildman, M. & Torres, R. M. (2001). Factors identified when selecting a major in agriculture. *Journal of Agricultural Education* 42(2), 46-55. <https://doi.org/10.5032/jae.2001.02046>

REQUEST for MODIFICATION

For information or help completing this form, contact: THE OFFICE OF RESEARCH COMPLIANCE (ORC)
 Phone: 334-844-5966 E-Mail: IRBAdmin@auburn.edu Web Address: <http://www.auburn.edu/research/vpr/ohs>

In MS Word, click in the white boxes and type your text; double-click checkboxes to check/uncheck.

- Federal regulations require IRB approval before implementing proposed changes.
- Change means any change, in content or form, to the protocol, consent form, or any supportive materials (such as the Investigator's Brochure, questionnaires, surveys, advertisements, etc.). See Item 4 for more examples.
- Form must be populated using Adobe Acrobat / Pro 9 or greater standalone program (do not fill out in browser). Hand written forms will not be accepted.

1. Today's Date	03/30/2020
------------------------	------------

2. Principal Investigator (PI)	
Principal Inves. (title): Jamie P Wise Department: C&T College of Edu. Phone: 229-387-8204 AU E-mail: jpw0063@auburn.edu	Faculty PI (if PI is a student): Christopher A Clemons Department: C&T College of Edu. Phone: 334-844-4411 AU E-mail: cac0132@auburn.edu
Contact person who should receive copies of IRB correspondence (Optional) Name: Phone: AU E-mail:	Department Head: David Virtue

3. AU IRB Protocol Identification	
3.a. Protocol Number	#20-046
3.b. Protocol Title	First Year Student Perceptions and Effectiveness of Social Media Influence in College of Agriculture Retention Efforts in Southeastern Land-Grant Universities
3.c. Current Status of Protocol—For active studies, check ONE box at left; provide numbers and dates where applicable	
<input checked="" type="checkbox"/> Study has not yet begun; no data has been entered collected	
<input type="checkbox"/> In progress If YES, number entered Adverse events since last review	Approval Dates: From To
<input type="checkbox"/> Data analysis only	
<input type="checkbox"/> Funding Agency and Grant Number:	AU Funding Information:
<input type="checkbox"/> List any other institutions and/or IRBs associated with this project: University of Georgia, University of Florida, Louisiana State University, Texas A&M, and Clemson University	

4. Types of Change	
Mark all that apply, and describe the changes in item 5	
<input type="checkbox"/> Change Key Personnel	Attach CITI forms for new personnel.

The Auburn University Institutional Review Board has approved this Document for use from
 04/01/2020 to _____
 Protocol # 20-048 EX 2001

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Attach permission forms for new sites.

Adding Clemson University as an additional Land-Grant University that will participate in the study.

Change in methods for data storage/protection or location of data/consent documents

Change in project purpose or project questions

Change in population or recruitment
Attach new or revised recruitment materials as needed; both highlighted version & clean copy for IRB approval stamp

Change in study procedures
Attach new or revised consent documents as needed; both highlighted version & clean copy for IRB approval stamp

Change in data collection instruments/forms (surveys, data collection forms)
Attach new forms as needed; both highlighted version & clean copy for IRB approval stamp

Other
(BUAs, DUAs, etc.) Indicate the type of change in the space below, and provide details in Item 5.c. or 5.d. as applicable.
Include a copy of all affected documents, with revisions highlighted as applicable.

5. Description and Rationale

5.a. For each item marked in Question #4 describe the requested changes to your research protocol, with an explanation and/or rationale for each.
Additional pages may be attached if needed to provide a complete response.

5.b. Briefly list (numbered or bulleted) the activities that have occurred up to this point, particularly those that involved participants.

5.c. Does the change affect participants, such as procedures, risks, costs, benefits, etc.

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▶
5.e. Attach a copy of <u>all</u> "stamped" IRB-approved documents currently used. (information letters, consents, flyers, etc.)
▶
5.f. Attach a copy of all revised documents (high-lighted revised version and clean revised version for the IRB approval stamp).
▶
6. Signatures
Principal Investigator <u>James P. Wise</u>
Faculty Advisor PI, if applicable <u>[Signature] Ph.D.</u>

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Re: Study: Student Perceptions and Effectiveness of COA's Social Media

Katie Black <khulse@clermson.edu>

Mon 3/23/2020 11:40 AM

To: Christina Leard <ccampb3@clermson.edu>; Nathan B Smith - Agribusiness <nathan5@clermson.edu>; Jamie Wise <jpw0063@auburn.edu>

All,

I got the approvals from our Associate Dean to send this to our students using our targeted email method. This is of course if you feel this would suffice for your needs. I need to ensure that Clemson is included in the IRB and also wanted to request that we receive the results of the survey.

Again, I'd like to be sure we clarify which majors to include.

Thanks.

Katie

Auburn University Human Research Protection Program

EXEMPTION REVIEW APPLICATION

For information or help completing this form, contact: THE OFFICE OF RESEARCH COMPLIANCE,
Location: 115 Ramsay Hall Phone: 334-844-5966 Email: IRBAdmin@auburn.edu

Submit completed application and supporting material as one attachment to IRBsubmit@auburn.edu.

1. PROJECT IDENTIFICATION Today's Date

a. Project Title First Year Student Perceptions and Effectiveness of Social Media Influence in College of Agriculture Retention Efforts in

b. Principal Investigator Jamie Palmer Wise Degree(s) BS Ag Comm, MS Ag Lead, EdS AgSci Ed
Rank/Title Doctoral Candidate Department/School C & T, College of Ed
Phone Number 229-387-8204 AU Email jpw0063@auburn.edu

Faculty Principal Investigator (required if PI is a student) Christopher A. Clemons
Title Assistant Professor Department/School C & T, College of Ed
Phone Number 334-844-4411 AU Email cac0132@auburn.edu

Dept Head David Virtue Department/School C & T, College of Ed
Phone Number 334-844-4434 AU Email dcv0004@auburn.edu

c. Project Personnel (other PI) - Identify all individuals who will be involved with the conduct of the research and include their role on the project. Role may include design, recruitment, consent process, data collection, data analysis, and reporting. Attach a table if needed for additional personnel.

Personnel Name Degree (s)
Rank/Title Department/School
Role
AU affiliated? YES NO If no, name of home institution
Plan for IRB approval for non-AU affiliated personnel?

Personnel Name Degree (s)
Rank/Title Department/School
Role
AU affiliated? YES NO If no, name of home institution
Plan for IRB approval for non-AU affiliated personnel?

Personnel Name Degree (s)
Rank/Title Department/School
Role
AU affiliated? YES NO If no, name of home institution
Plan for IRB approval for non-AU affiliated personnel?

d. Training - Have all Key Personnel completed CITI human subjects training (including elective modules related to this research) within the last 3 years? YES NO

Allow Space for the
AU IRB Stamp

Is this project funded by AU? YES NO If YES, identify source _____
 Is this project funded by an external sponsor? YES No If YES, provide the name of the sponsor, type of sponsor (governmental, non-profit, corporate, other), and an identification number for the award.
 Name _____ Type _____ Grant # _____

f. List other IRBs associated with this research and submit a copy of their approval and/or protocol.

2. Mark the category or categories below that describe the proposed research:

- 1. Research conducted in established or commonly accepted educational settings, involving normal educational practices. The research is not likely to adversely impact students' opportunity to learn or assessment of educators providing instruction. 104(d)(1)
- 2. Research only includes interactions involving educational tests, surveys, interviews, public observation if at least ONE of the following criteria. (The research includes data collection only; may include visual or auditory recording; may NOT include intervention and only includes interactions). **Mark the applicable sub-category below (i, ii, or iii).** 104(d)(2)
 - (i) Recorded information cannot readily identify the participant (directly or indirectly/linked); **OR**
 - surveys and interviews: no children;
 - educational tests or observation of public behavior: can only include children when investigators do not participate in activities being observed.
 - (ii) Any disclosures of responses outside would not reasonably place participant at risk; **OR**
 - (iii) Information is recorded with identifiers or code linked to identifiers and IRB conducts limited review; no children. **Requires limited review by the IRB.***
- 3. Research involving Benign Behavioral Interventions (BBI)** through verbal, written responses (including data entry or audiovisual recording) from adult subjects who prospectively agree and ONE of the following criteria is met. (This research does not include children and does not include medical interventions. Research cannot have deception unless the participant prospectively agrees that they will be unaware of or misled regarding the nature and purpose of the research) **Mark the applicable sub-category below (A, B, or C).** 104(d)(3)(i)
 - (A) Recorded information cannot readily identify the subject (directly or indirectly/linked); **OR**
 - (B) Any disclosure of responses outside of the research would not reasonably place subject at risk; **OR**
 - (C) Information is recorded with identifiers and cannot have deception unless participant prospectively agrees. **Requires limited review by the IRB.***
- 4. Secondary research for which consent is not required: use of identifiable information or identifiable bio-specimen that have been or will be collected for some other 'primary' or 'initial' activity, if one of the following criteria is met. Allows retrospective and prospective secondary use. **Mark the applicable sub-category below (i, ii, iii, or iv).** 104(d)(4)
 - (i) Biospecimens or information are publically available;
 - (ii) Information recorded so subject cannot readily be identified, directly or indirectly/linked; investigator does not contact subjects and will not re-identify the subjects; **OR**

- when use is regulated by HIPAA "health care operations" or "research or "public health activities and purposes" (does not include biospecimens (only PHI and requires federal guidance on how to apply); OR
- (iv) Research information collected by or on behalf of federal government using government generated or collected information obtained for non-research activities.
- 5. Research and demonstration projects which are supported by a federal agency/department AND designed to study and which are designed to study, evaluate, or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs. (must be posted on a federal web site). 104(d)(5) (must be posted on a federal web site)
- 6. Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture. The research does not involve prisoners as participants. 104(d)(6)

New exemption categories 7 and 8: Both categories 7 and 8 require Broad Consent. (Broad consent is a new type of informed consent provided under the Revised Common Rule pertaining to storage, maintenance, and secondary research with identifiable private information or identifiable biospecimens. Secondary research refers to research use of materials that are collected for either research studies distinct from the current secondary research proposal, or for materials that are collected for non-research purposes, such as materials that are left over from routine clinical diagnosis or treatments. Broad consent does not apply to research that collects information or biospecimens from individuals through direct interaction or intervention specifically for the purpose of the research.) **The Auburn University IRB has determined that as currently interpreted, Broad Consent is not feasible at Auburn and these 2 categories WILL NOT BE IMPLEMENTED at this time.**

***Limited IRB review – the IRB Chairs or designated IRB reviewer reviews the protocol to ensure adequate provisions are in place to protect privacy and confidentiality.**

****Category 3 – Benign Behavioral Interventions (BBI) must be brief in duration, painless/harmless, not physically invasive, not likely to have a significant adverse lasting impact on participants, and it is unlikely participants will find the interventions offensive or embarrassing.**

3. PROJECT SUMMARY

a. Does the study target any special populations? (Mark applicable)

- Minors (under 19) YES NO
- Pregnant women, fetuses, or any products of conception YES NO
- Prisoners or wards (unless incidental, not allowed for Exempt research) YES NO
- Temporarily or permanently impaired YES NO

b. Does the research pose more than minimal risk to participants? YES NO

Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or test. 42 CFR 46.102(i)

c. Does the study involve any of the following?

Use of school records of identifiable students or information from instructors about specific students.

YES NO

Protected health or medical information when there is a direct or indirect link which could identify the participant.

YES NO

Collection of sensitive aspects of the participant's own behavior, such as illegal conduct, drug use, sexual behavior or alcohol use.

YES NO

Deception of participants

YES NO

4. Briefly describe the proposed research, including purpose, participant population, recruitment process, consent process, research procedures and methodology.

This study will be conducted to determine first year student perceptions and effectiveness of social media influence in Colleges of Agriculture retention efforts. The purpose of this study is to describe the first year students, in introductory agriculture courses, addressing their University College of Agriculture's Social Media Platforms (Facebook, Twitter, Instagram, Snapchat, YouTube, Flickr, LinkedIn, Pinterest), as a communication, retention and occupational resource. This will be a regional Southeastern Land-Grant University study with Auburn, Louisiana State University, University of Georgia, University of Florida, Clemson and Texas A & M Colleges of Agriculture's first year students who are enrolled or have been enrolled in an introductory agriculture course this academic year. Each University participating in this study has been personally contacted by the PI (Wise) and communication is transpiring via phone or email. Professors involved in this study at each location and the PI (Wise) will select the introductory agriculture course that will be used in this study. Participants will be asked to complete an anonymous online questionnaire. Participants will be selected based on their enrollment within the course, if they are a first year student and at least 19 years old. Participants will be contacted through their professor by an email containing an information letter on Auburn letterhead and a link to the Qualtrics questionnaire which can accessed through electronic devices such as tablets, smartphones or computers. Participants will consent to the survey and view the guidelines before beginning their questionnaire. There are no compensation or costs associated with participation in this study. There are no anticipated risks or discomforts associated with

5. Waivers

Check any waivers that apply and describe how the project meets the criteria for the waiver. Provide the rationale for the waiver request.

- Waiver of Consent (Including existing de-identified data)
- Waiver of Documentation of Consent (Use of Information Letter)
- Waiver of Parental Permission (for college students)

All retrospective information will be de-identified.

The researchers will not track the responses of participants to the survey instrument. All participants will be at least 19 years of age.

ethnicity of the participant population.

Participants will be selected from introductory agriculture classes within Southeastern Land-Grant Universities. This study will focus on first year students of all genders, races and ethnicities that are enrolled in a College of Agriculture.

7. Does the research involve deception? YES NO If YES, please provide the rationale for deception and describe the debriefing process.

IRB # 2019-001

Version: Data (data document created)

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psychological discomfort or be perceived as discomfort above and beyond what the person would experience in daily life.

Research questions will be phrased to question individuals on the effectiveness and their perception of social media used by their University's College of Agriculture. Nothing of a physical or psychological discomforting nature will be asked.

9. Describe the provisions to maintain confidentiality of data, including collection, transmission, and storage.

An email link from Qualtrics will be used to collect data and will serve as consent. No identifiable information will be collected. Qualtrics uses encrypted servers and the data will be stored within the system.

(e.g., others will not overhear conversations with potential participants, individuals will not be publicly identified or embarrassed).

All data will be encrypted and no identifying information will be collected or stored.

11. Will the research involve interacting (communication or direct involvement) with participants?
 YES NO If YES, describe the consent process and information to be presented to subjects.
This includes identifying that the activities involve research; that participation is voluntary;
describing the procedures to be performed; and the PI name and contact information.

In the space below, provide any additional information you believe may help the IRB review of the proposed research. If attachments are included, list the attachments below. Attachments may include recruitment materials, consent documents, site permissions, IRB approvals from other institutions, etc.

Principal Investigator's Signature Jamie D. P. W. D. Date 03/31/2020

If PI is a student,
Faculty Principal Investigator's Signature Chelle Ph.D. Date 03/31/2020

Department Head's Signature [Signature] Date 3/31/2020



COLLEGE OF EDUCATION

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(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

INFORMATION LETTER

for a Research Study entitled

"First-Year Student Perceptions and Effectiveness of Social Media Influence in College of Agriculture Retention Efforts in Southeastern Land-Grant Universities"

You are invited to participate in a research study to identify social media platforms and other online communication channels of the College of Agriculture used by students. This study will also be used to describe the effectiveness of social media on student involvement, engagement, and retention within the College of Agriculture. The purpose of this study is to describe the first-year students in introductory agriculture courses, addressing their University College of Agriculture's Social Media Platforms as a communication, retention and occupational resource. The study is being conducted by *Jamie Wise, Ph.D. Candidate*, under the direction of *Dr. Christopher Clemons, Assistant Professor* in the Auburn University Department of Curriculum and Teaching. You are invited to participate because you are *first-year student enrolled at a Southeastern Land-Grant University in an introductory agriculture course* and are *age nineteen or older*.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete an anonymous online questionnaire using Qualtrics that will determine your perception and effectiveness of social media influence in College of Agriculture retention efforts. Your total time commitment will be approximately ten to fifteen minutes.

Are there any risks or discomforts? There are no discomforts associated with this study. Using Qualtrics online platform form the questionnaire minimizes the possibility of a loss of confidentiality as a potential risk. There are no other anticipated risks.

Are there any benefits to yourself or others? There are no direct benefits to you as a participant of this study other than your contribution to understanding the identified research questions and objectives indicated above.

Will you receive compensation for participating? You will not receive any compensation for participation within this study.

3040 Hoke Center

Auburn University

AL 36849-5212

Telephone:

334-844-4434

Fax:

334-844-6779

auburn.edu

The Auburn University Institutional
Review Board has approved this
document for use from
1/28/2020 to
Protocol # 20-046 EX 2001



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Are there any costs? There are no costs associated with your participation in this study.

If you change your mind about participating, you can withdraw at any time by closing your browser window containing the online questionnaire. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Once you've submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Curriculum and Teaching or the College of Education.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by not collecting email addresses or IP addresses through the questionnaire. Data will be secured, protected and maintained utilizing the Qualtrics platform. Information collected through your participation may be used by researchers, university faculty and staff. The data collected in this study may also be used for publications in professional journals and/or presentations at professional meetings.

If you have questions about this study, please contact Jamie Wise at jpw0063@auburn.edu (229) -387-8204 or Dr. Christopher Clemons at cac0132@auburn.edu (334) 844-8015.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW. YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Jamie P. Wise
Ph.D. Candidate

February 15, 2020

Christopher Clemons, Ph.D.
Assistant Professor

February 15, 2020

5040 Hasky Center
Auburn University,
AL 36849-5212

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334-844-4434

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CURRICULUM AND TEACHING

Subject: Guidelines/Timeline for sending out survey "First Year Student Perceptions and Effectiveness of Social Media Influence in College of Agriculture Retention Efforts in Southeastern Land-Grant Universities."

Dear College of Agriculture,

First of all, I want to thank you for partnering with us to ensure that this survey has further reach and gives us a true picture of the influence social media of our Colleges has on students. Your efforts are most appreciated! Attached you will find the all needed information and attachments you will need to send out to your students for their participation in the survey.

Timeline:

- Week 1
 - Wednesday , April 15, 2020 – Send Invitation Email
- Week 2
 - Monday, April 20,2020 – Send 1st Reminder Email
 - Friday, April 24, 2020 – Send 2nd Reminder Email
- Week 3
 - Monday, April 27, 2020 – Send 3rd/Final Reminder Email

*Please send/schedule all emails so that correspondence will arrive in participants email before 7:30 am.

If you have questions about this study, please contact Jamie Wise at jpw0063@auburn.edu (229) 387-8204 or my advisor, Dr. Christopher Clemons at cac0132@auburn.edu (334) 844-8015.

Sincerely,

Jamie Wise
Ph.D. Candidate
Auburn University

5040 Haley Center

Auburn University

AL 36849-5212

Telephone:

254-844-4024

Fax:

254-844-6789

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COLLEGE OF EDUCATION
CURRICULUM AND TEACHING

E-MAIL INVITATION FOR ON-LINE SURVEY

Dear Participant

I am a graduate student in the Department of Curriculum and Teaching at Auburn University. I would like to invite you to participate in my research study to identify social media platforms and other online communication channels of the College of Agriculture used by students. It will also be used to describe the effectiveness of social media on student involvement, engagement, and retention within the College of Agriculture. You may participate if you are a first-year student or first-year transfer agriculture student at a Southeastern land-grant University.

Participants will be asked to complete an anonymous online questionnaire. Your total time commitment will be approximately ten minutes.

Simply click on this link:

[Click here to begin the survey.](#)

Or visit

https://auburn.qualtrics.com/jfe/form/SV_26079tsyfrGPEIR

There are no direct benefits, compensation, or costs associated with your participation in this study. Responses to the survey are confidential and will not be connected to your name in any reports of data.

If you would like to know more information about this study, an information letter is attached to the survey or you can contact me directly by email or phone.

If you have questions about this study, please contact Jamie Wise at jpw0063@auburn.edu (229) -387-8204 or my advisor, Dr. Christopher Clemous at cac0132@auburn.edu (334) 844-8015.

Thank you for your time,

Jamie Wise
Ph.D. Candidate
Auburn University

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COLLEGE OF EDUCATION

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E-MAIL REMINDER INVITATION FOR ON-LINE SURVEY

Dear Participant,

Earlier this week we sent an e-mail to you asking you to participate in the survey dealing with student perceptions and effectiveness of social media used by the College of Agriculture.

We hope that you will take a few minutes and use the link below to complete the short survey. Simply click the link below.

[Click here to begin the survey.](#)

or visit

https://auburn.qualtrics.com/jfe/form/SV_28079tsyfrGPEIR

Universities are looking for ways to better serve you and to help you feel more connected. Your response will help your voice to be heard!

If you would like to know more information about this study, an information letter is attached to the survey link or you can contact me directly by email or phone. Please contact Jamie Wise at jpw0063@auburn.edu (229) -387-8204 or my advisor, Dr. Christopher Clemons at cac0132@auburn.edu (334) 844-8015.

Your response is voluntary and we greatly appreciate your time.

Sincerely,

Jamie Wise
Ph.D. Candidate
Auburn University

5080 Haley Center

Auburn University

AL 36849-5272

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334-844-6324

Fax:

334-844-6789

auburn.edu



COLLEGE OF EDUCATION

CURRICULUM AND TEACHING

E-MAIL REMINDER INVITATION FOR ON-LINE SURVEY

Dear Participant,

Recently we sent an e-mail asking for you to participate in the First Year Student Perceptions and Effectiveness of Social Media Influence in the College of Agriculture Survey. If you have already completed this survey, we would like to thank you!

If you have not answered the survey yet, we would like to encourage you do so. It should only take about ten minutes to complete. Simply click the link below.

[Click here to begin the survey.](#)

or visit

https://auburn.qualtrics.com/jfe/form/SV_26079tsyfrGPEIR

This survey is important to how your College of Agriculture communicates with you. Your opinion is important and vital to obtaining a true representation of the opinion of the College of Agriculture students.

If you would like to know more information about this study, an information letter is attached to the survey in the link or you can contact me directly by email or phone.

If you have questions about this study, please contact Jamie Wise at jpw0063@auburn.edu (229) -387-8204 or my advisor, Dr. Christopher Clemons at cac0132@auburn.edu (334) 844-8015.

Looking forward to response.

Sincerely,

Jamie Wise
Ph.D. Candidate
Auburn University

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COLLEGE OF EDUCATION

CURRICULUM AND TEACHING

E-MAIL REMINDER INVITATION FOR ON-LINE SURVEY

Dear Participant,

Last week we contacted you asking for your help with the 2020 First Year Student Perceptions and Effectiveness of the College of Agriculture's Social Media Influence. We are again reaching out to you in hopes that you will take a few minutes to complete this short survey. Your response is necessary to ensure the results are as accurate as possible. We look forward to your response!

If you have not answered the survey yet, your response is needed. Use the link below to begin the survey.

[Click here to begin the survey.](#)

or visit

https://auburn.qualtrics.com/jfe/form/SV_28079tsyfrGPEIR

Responses to the survey are confidential and will not be connected to your name in any reports of data. If you would like to know more information about this study, an information letter is attached to the survey or you can contact me directly by email or phone.

If you have questions about this study, please contact Jamie Wise at jjw0063@auburn.edu (229) -387-8204 or my advisor, Dr. Christopher Clemons at cac0132@auburn.edu (334) 844-8015.

Sincerely,

Jamie Wise
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auburn.edu

Perceptions of Undergraduate Experience in Social Media Environments

IQ Score: Fair | Published

Default Question Block Block Options

THIS SURVEY IS BEST TAKEN ON A DESKTOP COMPUTER

This survey should take approximately 10 minutes to complete.

Your participation and expertise is important and valued!

The purpose of this study is to describe the first-year students in agriculture courses, addressing their University College of Agriculture's Social Media Platforms as a communication, retention and occupational resource. You may participate if you in your first year at a College of Agriculture within a Southeastern land-grant University. This study can be taken on a smartphone, desktop, laptop, or tablet (survey is best taken on a desktop). You and the other identified participants are the only source of data for this study. We ask you to review the informed consent information sheet (details) and complete the accompanying questionnaire; your participation will take about 10 minutes.

Participants will be asked to complete an anonymous online questionnaire that will determine your perception and effectiveness of social media's influence in College of Agriculture retention efforts. Your total time commitment will be approximately ten to fifteen minutes.

Your participation is voluntary. You may stop participating at any time. You will not be compensated for participation. Participation involves minimal risk (no more than occurs during daily life). Information about participants will be kept confidential and no individual responses will be reported.

Please do not hesitate to contact Jamie Wise (Primary Researcher) at jpw0063@auburn.edu or Dr. Chris Clemons (Doctoral Advisor, 334-844-8015) at cac0132@auburn.edu if you have any questions about this research project.

Please click here to review the information letter. [Info_Letter_Wise.pdf](#)

Thank you
Jamie Wise, Doctoral Candidate
Auburn University
Agriscience Education


I AGREE to participate (I have read the informed consent information sheet and agree to participation)


I DO NOT wish to participate


Page Break


SM1


Which of the following social media applications do you use most often?

 Facebook

 Instagram

 Snapchat

 Twitter

 Pinterest

Page Break

S 1 **Section One: Information Related to Social Media Usage.** Please review each statement or question regarding your use of social media as a student in the College of Agriculture.



Page Break

SM 1 Which social media platforms do you currently use? Select all that apply.

SM 1



- Facebook
- Twitter
- Instagram
- Snapchat
- YouTube
- Flickr
- LinkedIn
- Pinterest
- None. I do not use social media.



Condition: None. I do not use social m... is Selected. Skip To: End of Survey.

SM 2 Which 3 social media platform do you use the most frequently? Select three.

SM 2



- Facebook
- Twitter
- Instagram
- Snapchat
- YouTube
- Flickr
- LinkedIn
- Pinterest
- None. I do not use social media.

SM 3 How frequently do you check your social media accounts?

SM 3



- Less than once a day
- Once a day
- 2 to 3 times a day
- 4 to 10 times a day
- Over 10 times a day
- Does not apply

Page Break

SM 4

Do you expect your College of Agriculture to have a presence on social media?



- Yes, I expect my College of Agriculture to have a social media presence.
- No, I do not expect my College of Agriculture to have a social media presence.



SM 5

Which College of Agriculture social media platforms do you "follow"? Select all that apply.



- Facebook
- Twitter
- Instagram
- Snapchat
- YouTube
- Flickr
- LinkedIn
- Pinterest
- None. I do not follow my college on social media.

SM 6

Which communication methods provide you with information about the College of Agriculture? Select all that apply.



- In class
- Club meetings



- E-mail
- Printed materials (signs, posters, etc.)
- Social Media
- Website
- Personal contact with professors
- Personal contact with other students

Page Break

5.2



Section Two: Information Related to Social Media Content. Please review each statement or question regarding the content of social media of the College of Agriculture.

	Strongly agree	Agree	Neither Agree or Disagree	Disagree	Strongly disagree
1. College of Agriculture social media posts are informative.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. The variety of social media content (posts, videos, pictures, polls, etc.) used by the College of Agriculture is appropriate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Social media posts should occur more frequently from the College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Social media posts should occur less frequently from the College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. The College of Agriculture's social media posts have informed me of potential careers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. The College of Agriculture's social media posts have informed me of possible internships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C.7



7. What types of posts do you enjoy most on the College of Agriculture's social media? Select all that apply.

- Student spotlights
- Alumni spotlights
- Information on different majors
- Upcoming College of Ag events
- Available internships
- Available careers
- News about College of Ag
- Club meeting information
- Alumni events
- Fun facts
- Images

C 8

8. Which of the following events are most common in your social media from the College of Agriculture? Select all that apply.



- Student spotlights
- Alumni spotlights
- Information on different majors
- Upcoming College of Ag events
- Available internships
- Available careers
- News about College of Ag
- Club meeting information
- Alumni events
- Fun facts
- Images

Q70



Page Break



Section Three: Information Related to Social Media Relevance. Please review each statement or question regarding the relevance of social media to you as a student in the College of Agriculture.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. As a student, the College of Agriculture social media posts are relevant to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. As a student, the videos the College of Agriculture post on social media are relevant to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. As a student, the pictures the College of Agriculture post on social media are relevant to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. As a student, the employment interviews the College of Agriculture post on social media are relevant to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. As a student, the student interviews the College of Agriculture post on social media are relevant to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. As a student, the alumni interviews the College of Agriculture post on social media are relevant to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Page Break

5.4



Section Four: Information Related to Social Media Engagement. Please review each statement or question regarding your engagement of social media as a student in the College of Agriculture.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. The College of Agriculture's social media is an important part of my college experience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. The College of Agriculture's social media encourages me to follow their account.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. The College of Agriculture's social media should reflect the needs of current students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I often "like" social media posts by the College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I often share or re-tweet social media posts by the College of Agriculture .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I often hashtag social media posts that relate to the College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I often post a comment on social media posts by the College of Agriculture .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

5 5



Section Five: Information Related to Social Media's Influence of Connectedness. Please review each statement or question regarding the influence of social media on connectedness to the College as a student in the College of Agriculture.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. I feel welcomed as a student by the social media of the College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I can interact with others through social media of the College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. My first-year student anxiety was reduced by the social media of the College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I felt informed as a first-year student by the social media of the College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I felt as though I would fit into the family of the College of Agriculture because of their social media.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. The sense of family is evident through the social media of the College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. My connectedness to the college is enhanced through the social media of the College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I plan to remain a student within the College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. The decision to remain within the College was strengthened through the social media of College of Agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q71



Page Break

S 6 **Section 5(c): Information Related to Student Characteristics.** Please review each statement or question regarding your characteristics as a student in the College of Agriculture.



D 1 Which University are you currently attending?



D 2 What is your major?



D 3 What is your age?



Page Break

D 4 Ethnicity origin (or Race): Please specify your ethnicity.



D 5 What is your gender?



D 6 Currently, I am best described as:



- A first-year student within the College of Agriculture
- A first-year transfer student in the College of Agriculture
- Other:



Page Break

D 8 What organizations were you a part of in high school? Select all that apply.



- FFA
- Other Career and Technical Student Organizations: (FBLA, HOSA, TSA, or SkillsUSA)
- 4-H
- National Honor Society
- Student Council
- School Affiliated Sports
- School Affiliated Music Organizations
- Faith-based Organizations (Church youth groups, PCA, etc.)
- None

D 9 What organizations are you a part of in college? Select all that apply.



- FFA
- Other Career and Technical Student Organizations: (FBLA, HOSA, TSA, or SkillsUSA)
- 4-H
- National Honor Society
- Student Council
- School Affiliated Sports
- School Affiliated Music Organizations
- Faith-based Organizations (Church youth groups, PCA, etc.)
- Greek Life
- Other:

D 10 Which of the following best describes your hometown? Select the one that most closely matches.



- On a farm or ranch
- In a rural area/small town (10,000 or less)
- In a large town (10,000 to 50,000)
- In a large city (50,000 or more)

Q72



[Add Block](#)