ABSTRACT

ANDREATTA, RACHELLE RENEE. How Agricultural Educators are Drawn to Their Career Path: An Examination of Agricultural Educators in Three States. (Under the direction of Dr. Travis Park).

This study aimed to determine factors and categories of motivation affecting career decision-making for agriculture educators in Colorado (*n*= 63), North Carolina (*n*= 110), and Texas (*n*= 82). In addition, all factors for decision-making were broken down by gender, ethnicity, certificate obtainment method, and FFA membership.

A quantitative close-ended survey via Qualtrics was utilized in this study; the instrument was designed specifically for this study. In order to qualify for this study, participants had to be currently teaching agriculture in Colorado, North Carolina, or Texas. Participants were selected through a random number generator to ensure there was no bias in participant selection. Question categories were developed and grouped for participants to rate the level of influence the item had on their decision to teach. The categories are consistent with Factors Decision to Teach Ag, Recruitment Factor Impact, Recruitment Activity Influence, Influential People, Influential Clubs and Organizations, and Influential Factors. These constructs consisted of a variety of combinations of questions in correlation to the Ag Ed FIT-Choice® model (Lawver, 2009) and Factors that Motivate High School Agriculture Teachers to Teach (Ismail & Miller, 2021).

Through an overall analysis of the data collected, it was found that altruistic motivates are the primary driving factor in agriculture teachers' decision to teach. These items were rated by impact level on a 7-point Likert-type scale where -3 is Highly Negative, -2 is Negative, -1 is Somewhat Negative, 0 is Neutral, +1 is Somewhat Positive, +2 is Positive, and +3 is Highly Positive. The factors that were the most highly positive influences were "I enjoyed seeing the impact ag teacher have on their students (*m*= 2.43)," "I want to contribute to youth (*m*= 2.27),"

the participant's high school ag teacher (*m*= 2.21), the sense of community felt in the agriculture field (*m*= 2.15), and “I want to make a contribution to society (*m*= 1.96).” While in comparison, participants' data revealed that agriculture teachers are less positively influenced by extrinsic factors in regard to career decision-making than intrinsic and altruistic factors, with the exception of a select few people in the agriculture teachers' lives.

How Agricultural Educators are Drawn to Their Career Path: An Examination of Agricultural Educators in Three States.

by
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A thesis submitted to the Graduate Faculty of
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DEDICATION

This thesis is dedicated to Jhett and Madix Andreatta. Thank you for always being my reason to work hard and for giving me a reason to want to teach future agriculturalists. Thank you for always being my personal cheer squad and motivating me throughout your entire lives. I love you both!

BIOGRAPHY

Rachelle Andreatta grew up in the small town of La Veta, Colorado, on her family cattle operation, where she gained her love for all things agriculture. She graduated from La Veta High School in 2018 and moved to Lubbock, Texas, to attend Texas Tech University to pursue a degree in Agriculture Education. During her time in Texas, she spent time working in the oil field with her dad, where she was exposed to vast amounts of West Texas Agriculture, and her love for agriculture grew even more. In May of 2021, she graduated from Texas Tech Magna Cum Laude and moved to Cameron, North Carolina, with her fiancé and Border Aussie puppy Sarge to pursue a master’s degree in Agricultural and Extension Education.

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CHAPTER 1: INTRODUCTION

Introduction

School-based agricultural education has suffered a shortage of career professionals since 1917 (Eck & Edwards, 2019), the year of the formal federal establishment and funding of agricultural education in public schools. In 2010, Kantrovich reported that 7,775 school-based agricultural education programs were responsible for employing 11,557.5 agricultural educators. In 2019, 8,504 programs employed 13,189.5 teachers (Foster et al., 2020). In the three years prior to 2020, 729 new programs emerged, adding to the many openings for agricultural educators in the United States (Foster et al., 2020).

Foster et al. (2020) reported 28 states combined closed 36 programs due to a lack of qualified educators to fill the teaching vacancies. In 1967, Woodlin stated, "The continuing shortage of vocational agricultural teachers may develop into a major crisis in the United States unless prompt, concentrated action is taken in each state" (p. 10). Nevertheless, the gap between the supply and demand of agricultural educators continues to grow (Smith et al., 2019).

In North Carolina, the number of teaching positions has increased from 520 in 2017-18 to 594 in spring 2023 (T. Park, personal communication). This is a 14.2% growth over that time. Additionally, from 2015 to 2021, Colorado reported 20 new agriculture teacher positions throughout the state. However, it should be noted that there was a loss of five positions from 2018 to 2021 due to a lack of teachers available. Moreover, Texas reported an increase of 185 positions from 2015 to 2021 while still losing 27 positions and having 21 programs close entirely due to a lack of certified agricultural teachers (https://www.naae.org).

There is an ever-growing need for field professionals, sparking researchable questions. How do agricultural education professionals, especially those associated with campaigns such as the National Council for Agricultural Education (The Council) and the National Association of Agricultural Educators (NAAE) Teach Ag initiative, encourage students to pursue degrees or certifications in agricultural education? According to the Agricultural teacher's Creed (https://www.naae.org/whoweare/creed.cfm), agricultural teachers are teachers "by choice and not by chance" (¶1); are they really? Did most current agricultural teachers intentionally make a choice to teach? Or, did some teachers fall into teaching by chance? Do they remain in teaching by choice or chance? Can teachers recall a decision point in time where they decided to teach agriculture? Or, was the "decision" to teach really a series of several small events and episodes, a progression of inclination, that led them to teaching agriculture? Researchers must first understand how and why students decide to teach to answer these questions.

Answering these questions may help state agricultural education staff, teacher educators, university recruiters, and even agricultural teachers encourage young people to pursue a career in teaching agriculture. This research adds to the body of literature by focusing on the decision point or progression of inclination to teach agriculture.

This research explored incorporating four topics that came to light through a thorough literature review. Topics included influencers that drive teachers to teach, namely intrinsic, extrinsic, and altruistic factors that influence the decision-making category. These factors have been observed through nearly half a century of research and continue to grow in detail and accuracy. Through further evaluation of the literature, and studies, researchers can expect these categories to build upon each other and allow researchers to pinpoint essential conclusions that lead people to decide whether the decision to teach is by *choice* or by *chance*.

National Council for Agricultural Education

The National Council for Agricultural Education (The Council) is an organization structured to support agricultural educators, state staff, and agricultural teacher educators. The mission of The Council is to lead future school-based agricultural education programs by: "Identifying opportunities and resources, providing a forum for thought and direction, and focusing on academic and career success for all students" (The Council, 2012, About Us). This organization conducts business throughout all 50 states with involvement from a variety of other agricultural education-related organizations and universities. The Council was originally developed to create an environment for national leaders with agricultural education to meet and discuss initiatives to improve the agricultural education system (https://thecouncil.ffa.org/about-us/). The Council strives to stimulate positive growth in agricultural education organizations by serving as a sponsor and idea hub for agricultural education recruitment ideas for various movements and organizations such as Teach Ag, the National FFA Organization, and the National Association of Agricultural Educators.

Teach Ag Recruitment Initiative

The National Association of Agricultural Educators (NAAE) is responsible for numerous recruitment efforts for agricultural educators nationwide. The broad term of the recruitment initiative is *Teach Ag*. *Teach Ag* programs include but are not limited to Teach Ag Ambassadors, #TeachAgDay, State Teach Ag Results (STAR) programs, Teach Ag webinars, Teach Ag promotional materials, as well as supportive research regarding Agricultural teacher supply and demand data (https://www.naae.org/teachag/).

Teach Ag Ambassadors are college students all across the United States who are passionate about agricultural education and the agriculture industry as a whole. These selected individuals are trained to communicate with other college and high school-level students to assist in recruiting them to become agricultural teachers. The Teach Ag Ambassadors attend functions at their local, university, state, and national levels to provide information and useful materials to prospective agricultural teachers.

NAAE also supports an initiative called #TeachAgDay. This initiative is one day out of the year that recognizes the many hats that agricultural teachers wear in their careers. This day revolves around agricultural teachers sharing their stories of why they teach agriculture, and its importance and effectiveness to therefore encourage their students to pursue agricultural education as a career pathway.

STAR program states are allocated funding in the amount of $8,000 each year to support recruitment activities which vary by state and annual funding. Additionally, the states who participate in this program receive recourses to assist in developing a plan to tackle the agricultural teacher shortage.

Research, promotional material, and webinars are all additional methods employed by the NAAE to recruit and retain agricultural teachers. These materials are then supplied to all who serve as educators and representatives of the Teach Ag Program to serve as educational and recruitment methods for the program.

While all of these efforts are excellent methods utilized to recruit young people to become agricultural educators, the needs and effectiveness of recruitment methods are constantly adapting. Calling for this need for research to determine the effectiveness of these events and activities in their ability to influence individuals to become agricultural educators.

Problem Statement

While agricultural education is a topic of significant interest for schools, students, and future educators, there has continued to be a shortage of agricultural teachers dating back to the Smith-Hughes Act of 1917 (Hillison, 1987). According to the National Agricultural education Supply and Demand study conducted in 2021 across the nation, 29 states reported a loss of 60 agricultural teachers and 30 program closures, additionally with 84 positions remaining open as of September 15, 2021 (Smith et al., 2022). While there is a plethora of research supporting teachers' reasons for leaving or staying in agricultural education, there is limited research available related to the career decision-making of agricultural teachers. While both items are of high importance, the need to determine why agricultural teachers become teachers is essential to recruiting young people and those in career transition as agricultural teachers to address the perennial shortage. In order to fill the gap of agricultural teachers needed nationwide, researchers must first work to determine what agricultural teachers choose their career to assist in career recruitment methods.

Purpose Statement and Research Questions

Nationally, agricultural teachers are in high demand. Local school districts desire to add and expand agriculture course offerings in their schools. Nevertheless, the number of licensed teachers is less than the demand for agricultural teachers (Eck & Edwards, 2019). To provide insights into the career choices of agricultural teachers, the purpose of this research was to determine the linkage between how and why agriscience teachers choose their career paths. In other words, is the decision to teach by *choice* or by *chance*? This survey research engaged agricultural teachers of all experience levels in Colorado, North Carolina, and Texas. The data collected was used to answer these objectives:

(1) Was the decision to teach by choice or by chance?

(2) Do recruitment methods employed by the Teach Agriculture Campaign and universities stimulate teacher recruitment?

(3) How does the decision-making process vary (a) by state, (b) for those identifying as females versus males, (c) by ethnicity, (d) by traditional versus lateral entry licensure pathways, and (e) for former FFA members versus non-FFA members?

Scope and Significance of Research

This study's population is 145 agricultural teachers in Colorado, 2,500 in Texas, and 560 in North Carolina. The goal of surveying agricultural teachers in three states is to obtain diverse data because educators in each selected state have varying requirements for obtaining teacher licenses, varying course curricula, and contract requirements throughout the year. Contract requirements can vary by the expectations of livestock shows, conferences, professional development, and/or extracurricular requirements expected of teachers. By studying these educators, those in teacher recruitment roles will be better equipped to take informed action regarding how to recruit future agricultural educators more effectively to the field and close the gap between the supply of new agricultural teachers and the vacancies available to them.

This research aimed to learn what draws agricultural educators to their career fields to improve recruitment methods. This study is expected to add to the foundation of literature supporting career decision-making in agricultural education. There are currently no studies regarding agricultural educator recruitment/career decision-making that have studied teachers in multiple states simultaneously. By analyzing teachers in the states individually, we will gain knowledge of the state's teachers and help explain whether *choice* or *chance* drew them into the teaching profession. However, by comparing each state's results, we hope to observe differences between each state and better ways to tailor our recruitment programs and methods.

Operational Definitions

To better promote understanding of the terminology used within this study, the following definitions of key terms are provided:

4-H – A youth development organization for ages 8-18 seeking to promote youth development, facilitate learning and engage youth in the work of their community through the Cooperative Extension Service to enhance their quality of life (https://4-h.org).

Agricultural education –An instructional program for students in grades 6 through 12 to learn about science, business, plant, and animal production and/or about the environmental and natural resources systems (https://www.ffa.org).

Agricultural educator – An individual who is certified at the state or national level to teach agriculture-related classes to high school or middle school students.

Agriscience Fair – The use of scientific principles or emerging technologies applied to animal science, environmental or natural resource systems, food production and processing systems, plant systems, power, structural and technical systems, or social systems (https://www.ffa.org/participate/awards/agriscience-fair/).

Altruistic – Demonstrating behavior or having motivation which are selfless in nature and have little to no effect on them as individuals (Fehr & Fischbacher, 2003).

CDE – Career development events which are competitive events that assist students in developing career and college readiness skills (https://www.ffa.org/participate/cde-lde/).

CFFA - Colligate FFA, an extension of FFA for college students.

Chance – An agriculture teacher pursued their career path as a secondary career plan.

Choice – An agriculture teacher pursued their career path as their initial career plan.

Cooperative Extension Service – A partnership of county, state, and federal governments to empower farmers, ranchers, and communities of all sizes to meet the challenges they face, adapt to changing technology, improve nutrition and food safety, prepare for and respond to emergencies, and protect our environment (https://www.nifa.usda.gov/about-nifa/how-we-work/extension/cooperative-extension-system).

Extrinsic – Items or individuals that motivate individuals to pursue or not pursue something (Wolman, 1989).

FFA – An intracurricular student organization for those in high school and middle school interested in agriculture and leadership (https://www.ffa.org).

Fallback Career – Agricultural education was not the original career plan of the participant (Lawver, 2009).

Intrinsic career value – Indefinable motivators that motivate individuals to enjoy their careers (Lawver, 2009).

LDE – Leadership Development Event, a competitive event for FFA members to develop public speaking and career-related skills (https://www.ffa.org/participate/cde-lde/).

National Council for Agricultural Education – A board that provides leadership for stakeholders in agriculture, food, fiber, and natural resources systems education.

Proficiency Award - Honor FFA members who, through supervised agriculture experiences, have developed specialized skills that they can apply toward their future careers (https://www.ffa.org/participate/awards/proficiencies/).

Personal utility value – Benefits of a product or service that satisfy personal needs (Lawver, 2009).

Recruitment – The act of influencing people to participate in or attend an event, activity, club, organization, or school.

SAE – Supervised Agriculture Experiences. A project, job, internship, or research activity performed by students in agriculture classes (https://saeforall.org).

Self-Perception – A person's individual awareness of their ability to perform a career successfully (Lawver, 2009).

Social Utility Value - Benefits of a product or service that satisfy interpersonal needs (Lawver, 2009).

Star Award – "Members have gone above and beyond in their attitude, involvement, community service and supervised agricultural experience. Finalists for these awards have mastered skills in production, finance, management and/or research." (https://www.ffa.org/participate/awards/american-star-awards/)

Teach Ag – A movement sponsored by NAAE to encourage students to consider agricultural education as a career pathway (https://www.naae.org/teachag/).

Limitations

While potentially helpful, this research also harbors limitations. For example, nationwide research is necessary to understand how this study applies to other states. While North Carolina, Texas, and Colorado are diverse in various ways in correspondence to agricultural education, results of this study are not expected to mirror what can be gathered nationwide. Findings are presented so that agricultural education policy-makers may utilize these results to develop more effective recruitment methods for agricultural education for high school and college students. However, results may vary from state to state.

While this study prompted several questions regarding FFA and agricultural education background, only one question about 4-H background exists. This information could have been vital to the study; however, with the study being already quite lengthy, it was decided to remove additional questions regarding 4-H, because it is less directly related to school-based agricultural education than FFA.

While this survey set out to answer questions regarding the influence of FFA-related activities, the research did not include these questions due to survey programming errors. It is recommended questions about FFA involvement be included and further analyzed to determine if FFA activities influence members to become agricultural teachers. It is noted that participants were asked if they ever held an FFA office; while sufficient data was collected in this study, the option for chapter office was not included and potentially falsified data for this question.

Chapter Summary

The field of agricultural education is constantly evolving and changing with the growth of society. The field of agricultural education has faced a shortage of educators since its development in 1917 (Eck & Edwards, 2019). Smith et al. (2022) conducted an annual supply and demand of agricultural teachers nationwide, and from this, it was found that in 2021 60 programs lost teachers, and 30 programs were closed due to the lack of certified agricultural teachers. Making it imperative to develop an understanding of what makes agricultural educators want to enter the career field.

Through this study, agricultural teachers in the states of Colorado, North Carolina, and Texas will be examined to determine the factors affecting the career decision-making of agriculture educators. The research questions of this study were focused on determining if career decision-making is different for gender, ethnicity, FFA involvement, and certification obtainment method, as well as if these teachers became agricultural teachers by choice or chance. Therefore, allowing the researcher to better understand the decision-making process of this population. Analysis of these states will open the door to nationwide research in determining what factors are most influential and assist in developing recruitment methods targeted toward this population.

CHAPTER 2: LITERATURE REVIEW

Introduction to the Literature Review

This chapter presents a review of literature revolving around career decision-making in agriculture education and the attributable factors. Additional information regarding recruitment efforts for both college and agriculture education is examined throughout to develop an understanding of efforts being put forth to draw people into the career of agriculture education.

While there are a variety of recruitment activities and events conducted by The Council, NAAE, National FFA, State-based Teach Ag organizations, Universities, and many others, there continues to be a nationwide shortage of agricultural teachers.

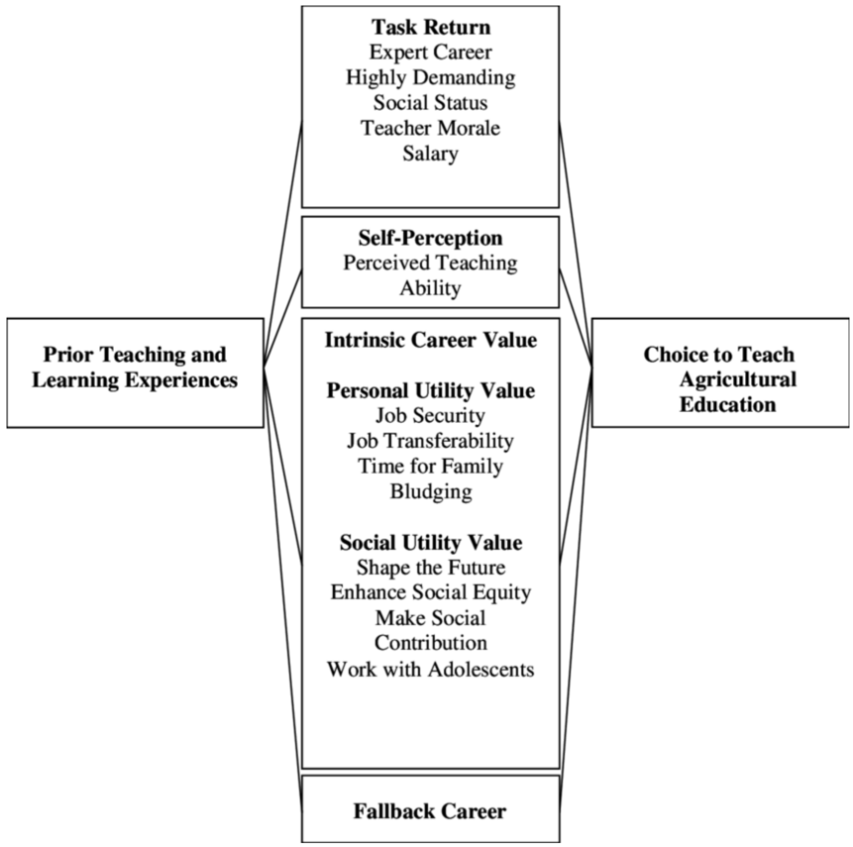
Theoretical Framework

Ag Ed FIT-Choice®

The Ag Ed FIT-Choice® model was adapted by Lawver (2009) and constructed initially as FIT-Choice® by Richardson and Watt (2006, 2007), which will serve as a portion of the theoretical framework for this study. The Ag Ed FIT-Choice® was created with the trends for teacher education literature and career choice literature in mind to support the efficacy of the models. The model was created by Lawver in 2009 for their study. Lawver (2009) studied 145 senior-level agriculture education students from nine states and 93 Institutions.

Figure 1.1

Ag Ed FIT–Choice® Model, adapted from Richardson and Watt (2006).



The Agriculture Ed FIT-Choice® model was created based on four primary categories: Task *Return, Self-Perception, Intrinsic Career Value, and Fallback Career* (Lawver, 2009). *An* explanation of *task return* is extrinsic factors influencing people to pursue agriculture education as a career and receive some benefit from this. These items can include but not be limited to social status, being in a career field with a high demand regarding the person's time and efforts, being in an expert career, and salary stability. *Self-perception* is the second factor in the figure and includes the person's ability, confidence in the field, and individual perception of their ability to fill the role of an educator successfully. *Intrinsic career value* is definable as one’s personal career motivation. *Personal utility value* characteristics are job security, transferability, time for family, and the ability to live through those they teach by instilling their knowledge and morals in them, otherwise known as bludging. *Social utility value* is the second subcategory based on the ideals of creating change around you while not having any direct impact upon oneself. The final primary category is a *fallback career* which is the idea that the educator initially selected a different major or career before pursuing agriculture education. The overarching ideal Ag Ed FIT-Choice® model (Figure 1) explains the determination and influence of perspective and current agriculture educators' intent to continue to pursue their career field.

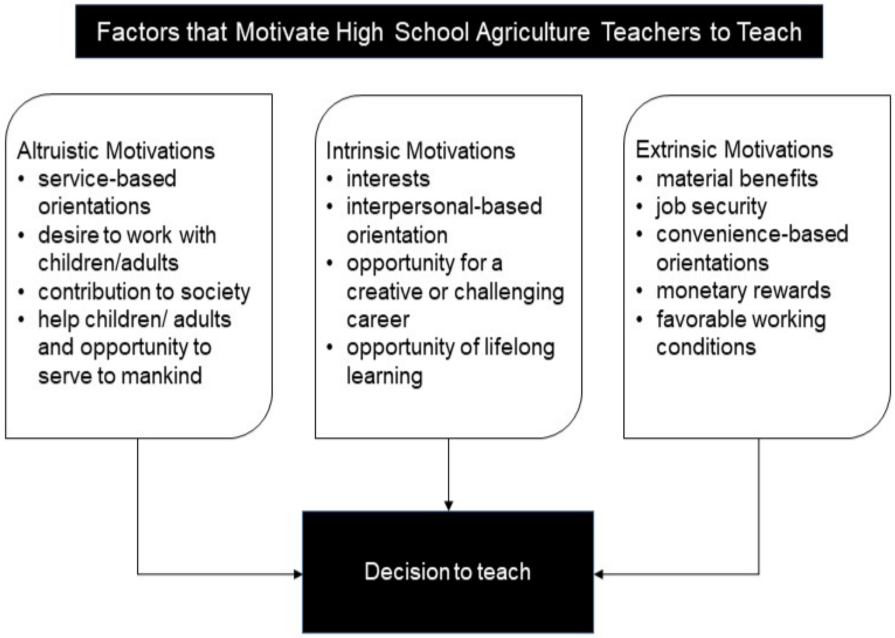
Factors that Motivate High School Agricultural Teachers to Teach

In 2017, Ismail and Miller conducted a quantitative census study of Iowa agricultural teachers (*n* = 252). This study broke all questions into three categories, which were based on the conceptual framework developed for that study (Figure 1.2). Items from this study were rated on a Likert-type scale where participants rated the level of agreeance they had with the items in the categories on their reason to become agricultural teachers. The categories within this study were *altruistic*, *intrinsic*, and *extrinsic* motivators.

From this study, it was concluded that *intrinsic* motivators and *extrinsic* motivators are the most influential factors for Iowa agricultural teachers' decision to teach. From this, it was further found that *altruistic* factors were not of any significant influence on Iowa teachers, as the primary driving factor was that participants felt “teaching would be enjoyable,” which was an *intrinsic* motivator.

Figure 1.2

Factors that Motivate High School Agriculture Teachers to Teach

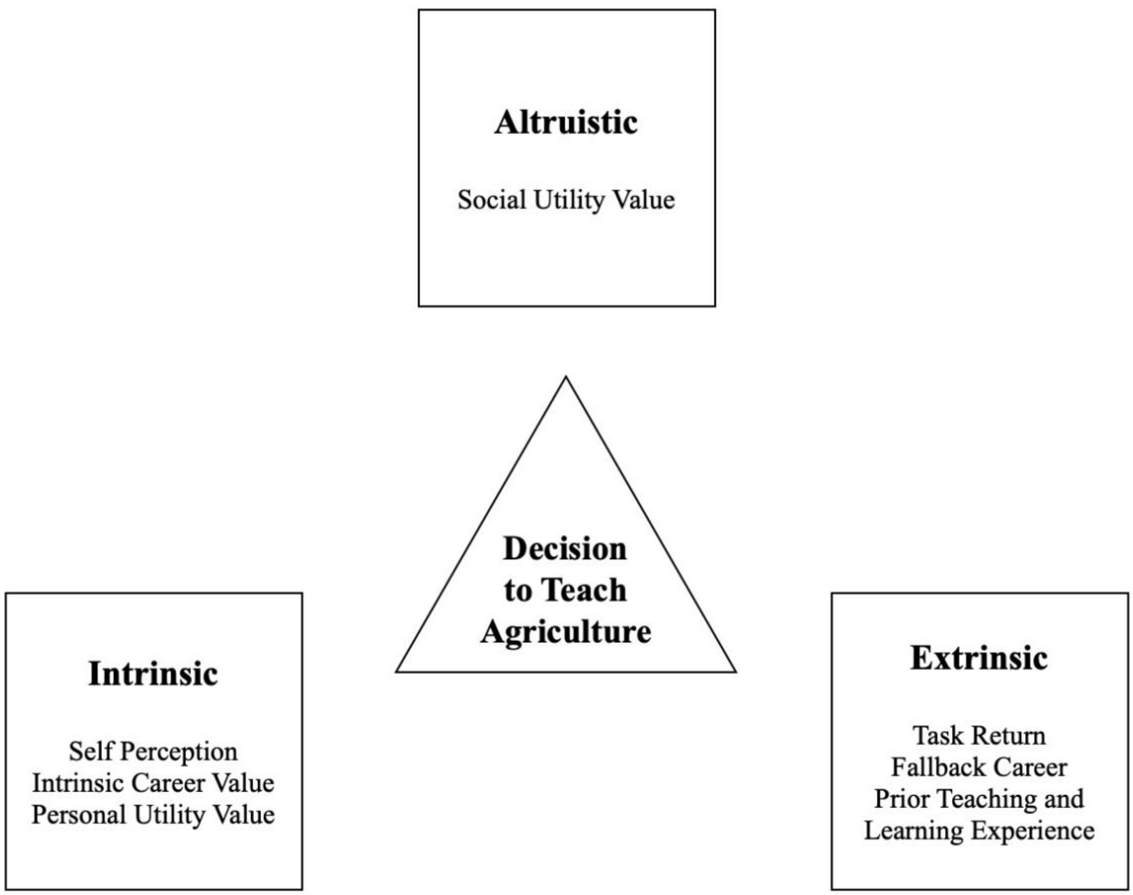


Conceptual Framework

Combining Ag Ed FIT–Choice® Model (Lawver, 2009) with the model developed by Ismail and Miller (2021, Figure 2) creates the overall frame for this study. As previously stated, (Lawver, 2009) created a model based around the original FIT–Choice® Model (Richardson & Watt (2006), which broadly explains the ideals around the items which play into the decisions of why people choose agriculture education as a career no matter the time in their life or type of entry. In contrast, Ismail and Miller (2021) determined that three types of influence affect decisions made by people in making career-based decisions. The first is altruistic motivations, including the desire to better the society around them through a meaningful service-based career (Ismail & Miller, 2021). Intrinsic motivation is second in the model, which is the individual's interest in the field fueled by the desire for lifelong learning and self-fulfillment (Wolman, 1989). The final category is extrinsic motivation, which can be an external factor that provides positive or negative external rewards commonly brought on by those closest to the person of interest (Wolman, 1989).

Figure 2

The Decision to Teach Agriculture Value Alignment



Through the utilization of both models, researchers create an overarching outline of consideration for a more in-depth examination of literature involving the decision to teach agriculture education. By applying *altruistic*, *intrinsic*, and *extrinsic* morals to the Agriculture Ed FIT-Choice® model, this study can dig deeper into the phenomenon behind the factors that influence decision-making and how people come to the decision to teach agriculture.

Factors Influencing Teachers' Decisions to Teach Agriculture

The literature revealed a plethora of themes, ideas, and primary factors that all play critical roles in the decision-making process of people who pursue careers in agriculture education. The first are the themes that arise through research on preservice agriculture education students. Ingram et al. (2018) found five themes, including *socializer influence, social value, passion for agriculture, alignment with personal values*, and *agriculture education factor*. *Socializer influence* is described as an influence on a person's decision to teach based on the individuals around them. *Social value* is based on altruistic tendencies portrayed by participants. These can be items such as this participant statement from Ingram et al. (2018) "Agricultural teachers are not teachers, they are advisors, they're life coaches, they're mentors, they're always there for you. That is why I want to teach agriculture." *Passion for agriculture* is described as an individual's drive and caring nature for the field of agriculture and all things that encompass it, which is yet another altruistic characteristic. *Alignment with personal values* varies greatly due to how individuals value items within their personal life. Finally, the *agriculture education factor,* which was the guiding factor of this study, relates to an individual's previous experience with School-based agriculture education. This study was a qualitative phenomenological research project utilized to gain information regarding preservice agricultural educators. The study focused on seven participants of all class identifications majoring in agriculture education at Utah State University. These factors appear to compare well with the FIT Choice® model (Watt & Richardson, 2006), which consists of socialization influence as the first construct, followed up by job requests, self-perception, intrinsic values, social values, and second career choice. These themes are further supported by a study of preservice agriculture education students conducted by Lawver and Torres (2011). This study surveyed 145 preservice agricultural teachers from nine states to determine career decision motivation. They determined that 61% of students fell into four categories of factors influencing the decision to teach: fallback career, working with adolescents, intrinsic career value, and job security. These categories were developed in studies of students with experience in agriculture through either work, FFA, or 4-H extension programs.

These categories, however, will be expanded when discussing preservice students who come from non-traditional agriculture backgrounds. A study conducted by Marx et al. (2017) sought to interview students who were selected through purposeful means at North Dakota State University, the University of Minnesota, and South Dakota State University. This study brought to light several statements made by the students, which shed light on the primary factors influencing students who do not have extensive experience in agriculture to actually teach agriculture. One student stated that "stomping out (agriculture) ignorance" was the factor driving them to pursue their degree (Marx et al., 2017). This statement can fall into the categories of both passions for agriculture as well as self-perception. Marx et al. (2017) determined that most students can find jobs relatively everywhere due to the teacher shortage, making job availability an item that should not be a major deciding factor. It was also found that the ability to transfer skills from agriculture education into other careers is comforting and influences them to pursue the career in the broadest of senses. Additionally, this study found that prior School-based Agriculture education-related experiences are not a primary motivating factor in the career decision-making of agricultural teachers. From this, researchers concluded that while we should expect agricultural teachers to be motivators for future agricultural teachers, we can only expect them to produce some future agriculture educators. This begs the question of how we can recruit and motivate future agricultural teachers who do not have previous school-based agriculture experience.

When considering missing portions in the literature involving themes of characteristics that either lead or deter people from pursuing teaching agriculture as a career is what drives people away from the career path. One primary ideal discussed by participants is that the field is full of people who will do anything to be the best and tend not to lift each other up (Marx et al., 2017). Agriculture education is a competitive field, especially for those who have a limited history within the field. One participant in the Marx et al. (2017) study stated it is intimidating being in a class of other preservice teachers who were state FFA officers or excelled in proficiencies (Marx et al., 2017). From this, researchers can infer that to understand why teachers choose to teach; researchers must also understand why people go through agriculture educator preparation programs and decide not to teach or eventually leave the field.

Park and Rudd (2005) conducted a Delphi study of agricultural teachers who prolifically produce future teachers in six southern states about how they influence their students to become agricultural teachers. They concluded that incorporating positive role models, building quality programs, and not discouraging students from teaching will help agricultural teachers move up on the level of influence when it comes to influencing their own students to become agriculture educators. They found five constructs that encouraged future teachers, including "encouragement, modeling, career counseling and awareness, program quality, and teacher effectiveness" (p. 82). Encouraging practices included offering a career pathway in agriculture, serving as a positive role model, encouraging FFA involvement, and having a positive attitude, confidence, and enjoyment of teaching.

The aforementioned conclusions lead to the question, if teachers are not inspiring students, then who is inspiring them? The answer may be found when considering extrinsic factors such as parents, job satisfaction, job security, rewards through FFA while in high school, or campus climate (Gates et al., 2020; Ismail & Miller, 2021; Marx et al., 2014). These trends should not be the extent of the factors that researchers focus on, as researchers move further to find things that inspire teachers to teach. It has been found that family was a primary influencer (Kotrlik & Harrison, 1987). However, this is just one example of how generational needs and influences change. In research by Rayfield et al. (2013), students indicated that their parents had little to no influence on their decisions on major or university. Which is further supported by Alston et al. (2020), as they also found parents to be the most influential person in students' decision in their major in college. This can be due to many reasons; people can either be positively or negatively influenced by those around them, which is often due to people saying teachers do not make much, are you sure that is what you want to do, or you are bright you can be much more (Ingram et al., 2018). To understand decision-making, researchers must first understand the trends of generations, for each time researchers track what works for a specific generation, it is expected to change relatively fast. It will not operate in the same fashion for generations to come and will become obsolete (Rayfield et al., 2013).

Intrinsic, Altruistic, and Extrinsic Factors Affecting Prospective Teachers

Ismail and Miller (2021) concluded that three categories influence teachers to teach. Altruistic factors are identified as secondary factors to push teachers to teach, while intrinsic and extrinsic factors are primary in either order depending on the person. This is also confirmed by Kotrlik and Harrison (1987), as their research concluded that in students' minds at the high school level, while altruistic factors may come into play for career decision-making, extrinsic and intrinsic motivators are of primary importance.

Extrinsic characteristics are built around intrinsic factors to motivate the person's conscious mindset for decision-making and moral means (Dickinson, 1989). Several intrinsic characteristics are prevalent in preservice teacher candidates, allowing researchers to determine what makes teachers want to teach (Ismail & Miller, 2021). Lawver and Torres (2012) found that the majority of teacher candidates had a positive experience involving teaching, which made them enjoy teaching as well as teaching agriculture. It was further supported that students viewed teachers as expert-level knowledge, a primary intrinsic motivator for postsecondary agriculture education students. When determining a similarity with high school students, there are fewer specifics regarding their drive to teach. A large pool of data specifies that self-appraisal and occupational information drive high school students to career pathways, creating a basis for further internal growth to find their career path (Marx et al., 2014). These intrinsic motivators will grow through the help of motivation from university supervisors, cooperating teachers, and high school agriscience teachers while in the preservice portion of their careers (Rocca & Washburn, 2008). Therefore, supporting statements made by Dickinson (1989) that extrinsic motivators build intrinsic motivation.

Intrinsic Factors

Harms and Knobloch conducted a descriptive study prior to 2005, which sought to determine why traditionally certified agriculture educators chose their careers. From this study, it was found that 24 of 29 participants' original plan was to become agriculture educators. With all participants being either extrinsically or intrinsically motivated to choose their career pathway. However, they also determined that extrinsic factors were less likely to be the driving factor in career decision-making, although it was the primary motivator in reasons why teachers leave the profession—determining that participants who become agricultural teachers due to intrinsic means were more likely to enjoy their careers and continue teaching.

They were further supported by a study conducted by Lawver and Torres, 2011. This study found that teaching is an intrinsically gratifying career pathway causing higher burnout rates for extrinsically motivated teachers. This led to the conclusion that intrinsically motivated teachers are more likely to encourage students to become agricultural teachers. This study was conducted in 2011, where researchers surveyed 145 students in agriculture educator prep programs with senior-level status in a total of nine states. This study aims to determine influential factors in preservice teachers' decision to teach agriculture.

Altruistic Factors

Fehr and Fischbacher conducted a study in 2003 that aimed to understand the nature of human development and change, which results in the development of altruistic tendencies. Human altruistic tendencies are often defined by the social norms to which they are confined. When people have strong altruistic tendencies, they are more motivated by long-term self-interest, which affects others more than themselves (Fehr & Fischbacher, 2003). In addition, they are motivated by awards and distinction. However, they do not enjoy these awards being publicly accolated (Palta, 2019). This study was conducted in the form of a mixed methods design which evaluated 289 teachers of all subjects to determine the attitudes and opinions of these teachers regarding altruistic motivators.

The study conducted by Gicheva (2022) revealed that teachers who work longer hours are often altruistically motivated. While these teachers may have been initially encouraged by different means were not studied. However, this can be applied to the field of agriculture education, seeing as how most agricultural teachers have extended contracts in comparison to science, math, or English teacher. In addition, it was found that intrinsically motivated teachers have an altruistic tendency driving them to have longer teaching hours, allowing for the assumption that altruism is dependent upon intrinsic motivators. This comprehensive study examined supply and demand in the private education sector in correlation to teaching hours, salary, benefits, and contract requirements to determine the reasoning for teacher burnout.

Extrinsic Factors

Extrinsic factors are items that persuade an individual to pursue or not pursue something, in this case, a career in agriculture education, due to an external reward or punishment (Wolman, 1989).

Kotrlik and Harrison researched career decision-making in high school seniors in 1886 by surveying 3,853 high school seniors in Louisiana via a close-ended questionnaire. Through the research done by Kotrlik and Harrison (1987), it was found that agricultural teachers have very little influence on students' career decision-making, while parents were the most influential extrinsic factor in career decision-making. This position was further supported by Rayfield et al. (2013). In the study conducted by Rayfield et al. (2013), they surveyed all students in the "Introduction to College of Agriculture and Life Sciences" class in the fall of 2009 and spring of 2010. From this study, it was found that, yet again, parents are the most influential person in students' life for career decision-making, while agricultural teachers are of little influence.

Difference in Decision-Making for Students of Color

Vincent et al. (2012) conducted a qualitative phenomenological study to gain insight into centralized reasons students of color pursue careers in agriculture education. This study consisted of 10 purposefully selected students at the National MANRRS Conference. Of the 10 participants, five were African American, and five were Latino-American. Vincent et al. (2012) stated that there needs to be more representation of populations of color in the agriculture education profession. According to the annual agriculture teacher supply and demand study conducted by Smith et al. (2021) of the license-eligible program completers (*n*= 788), 92% are white, 3.9% Hispanic/Latino, 1% American Indian/Alaskan Native, 0.8% African American, 0.3% Asian, and 0.8% Bi-Racial. Therefore, showing that initial data used to support Vincent et al. (2012) are still correct, there needs to be more people of color in agriculture education. Vincente et al. (2012) found that agricultural teachers of color are motivated by the intrinsic desire to continue to learn, a passion for agriculture, and a passion to make a difference. Additionally, they found two external motivators as well; these motivators are potential for career advancement and connections within the agriculture education profession. Additionally, participants identified that it was important for them to establish connections to those of similar lifestyles or identification.

Differences in Decision-Making by Gender Identification

Y. Barry Chung (2002) conducted a study that included 165 undergraduate students at a large southern university. Respondents were all participants in an introduction to phycology course. The respondents were rewarded with research study credit hours for participating in this study, which was conducted in a small group setting. This study was based on the idea that self-efficacy is different for all gender identifications creating a difference in career decision-making at a generalized baseline which was an individual's perceived ability to complete tasks. Through this research, it was found that there were no significant differences in self-efficacy and commitment between genders. These findings are consistent with previous research on Midwest and Rocky Mountain college campuses. However, it was noted that African American participants scored significantly higher in self-efficacy and commitment than their white counterparts. This result varied from previous research, as this university has a larger African American population, which the author expects had effects on the results.

Between the years 2009 and 2011, Meeussen et al. conducted annual online surveys for all surgical residents of the English Royal College to determine the level of determination, sacrifices made by women to enter male-dominated fields, and the structural mechanism in career decision-making for both men and women. Gender discrimination has been something women in male-dominated careers have faced for generations (Rudman et al., 2012). Meeussen et al. found that women tend to be intimidated by male-dominated career fields and are, therefore, less likely to pursue and make sacrifices for their careers. Therefore, coming to the conclusion is that the decision-making process for males and females in gender-dominated career fields is drastically different.

Agricultural Teacher Recruitment

In 2012 Calvin and Pense conducted a qualitative study of agricultural teachers in southern Illinois who were in attendance of a professional development event at Southern Illinois University-Carbondale. All teachers in attendance were asked to participate in this study, and all 23 teachers in attendance participated. The research team identified five barriers in recruiting high school students to become agricultural teachers. These barriers being time, economy, family, technology, and image. One study participant stated, "I probably spend an extra 600-700 hours outside of class with my students each year" (Calvin & Pense, 2012, p. 48). From this researcher concluded that students may be discouraged from becoming agricultural teachers by the number of extra work hours agricultural teachers spend outside of the classroom. However, teachers in this study brought several solutions to light for the issue of time. Several teachers stated that taking kids to tour campus is insufficient to get them interested in agriculture education. They brought up the idea of bringing students, professors, and university staff to the school would assist with the time constraints of their job. All participants were in agreement that agriculture education is a family, and by demonstrating this to students could be encouraging to them. This is an additional reason why students or professors visiting students could be impactful in their career decision. Additionally, the economy makes college hard for some students. However, tuition waivers or scholarships for students who are passionate about agriculture education would be a great way to encourage them to pursue agriculture education as a major in college. Overall, from this study, it was recommended that personalized visits or contact with high school students from professors or the university would be highly impactful on students' career decision-making. While in comparison, Rayfield et al. (2013) reported that from their study of College of Agriculture and Life Science first-year students, visits from university representatives were the least influential factor for students' career decision-making. They did, however, find that internet recourses available about college majors were the most influential for high school student's decision in the major they pursued in college.

Alston et al. (2020) conducted a study where they utilized an initial qualitative survey was sent to all land grant and non-land grant institution agriculture administrators in the United States. The administrators were asked to identify all recruitment efforts being put forth to recruit students into the college of agriculture at their institution. The additional rounds of this study asked the administrators to determine the effectiveness of these recruitment efforts. From this study, it was found that hobbies and personal activities related to agriculture was the most considerable exposure impact on high school students' decision to pursue careers in the agriculture field. Additionally, the most impactful reason for students' decision to attend their university was the friendly environment and faculty at the university. Further supporting the findings of Calvin and Pense (2012) that the faculty and potential environmental exposure from agriculture education departments would make notable impacts on student enrollment in agriculture education as their primary major at university.

Reason for Lack of Decision-Making

Finally, decision-making is the overarching question driving this study. According to Gati and Osipow (1996), three categories revolve around why decision-making is complex for those preparing to enter a career field: lack of readiness, lack of information, or conflicting information. All of which revolve around the inability of the person to make a clear decision. The study conducted by Gati and Osipow (1996) was conducted by surveying 200 20–22-year-old military members who were at the end of their military contract. Thus, providing insight into adult decision-making while also providing a sample pool of adults making their first career-based decision. This instrument was then analyzed for reliability and reconstructed, and sent to a group of 200 with similar characteristics. The results of this study were then based on the results of the second group of participants.

Conclusion of Literature

All of the information above will vary with each study and pool of participants, as pointed out by Rayfield et al. (2013), for they concluded that all criteria would change within every generation. It is imperative that the qualities that people fear when making decisions be considered in direct comparison with the Agriculture Ed FIT-Choice® model and the model developed by Ismail and Miller (2021). To not only understand what drives people to pursue careers in agriculture education but, more importantly, what pushes people who could be valued educators away from the field. There is missing information in the literature regarding this information, and this study aims to fill the gap of how variation in generations occurs, when the change happens, as well as what experiences differ regarding extrinsic motivators and how that can impact a person's intrinsic motivators (Lawver & Torres, 2011, 2012).

Park and Rudd (2005) concluded that further research is necessary and imperative from the students' viewpoints. To fully understand what makes students want to teach, researchers must dive into the literature and studies from the student's viewpoint. Furthermore, Ingram et al. (2018) concluded that the primary research on factors that makes people want to become teachers is quantitative and renders mixed and hard-to-compare results. To fill the gaps in the literature, researchers must first focus on the informational categories found in previous literature and build on them.

This study leads directly to the purpose, where researchers will further dive into the logistics and data of why teachers decide to teach. While this study is also quantitative, the goal is to create clarification among the results that currently exist, as well as acquire new data that will help researchers and professionals understand what contributes to people wanting to become agriculture educators. This literature allows for clarification among the avenues which need to be explored to answer the questions further:

(1) Was the decision to teach by choice or by chance?

(2) Do recruitment methods employed by the Teach Agriculture Campaign and universities actually elicit teacher recruitment?

(3) How does the decision-making process vary (a) by state, (b) for those identifying as females versus males, (c) by ethnicity, (d) by traditional versus lateral entry licensure pathways, and (e) for former FFA members versus non-FFA members?

CHAPTER 3: METHODOLOGY

Research Design

This research project was framed as stratified random sampling by state. Stratified random sampling separates a primary data group into smaller subgroups called strata (Aoyama, 1954). Random stratified sampling allows researchers to separate data by the state while observing the data as a whole. There are roughly 175 agricultural teachers in Colorado, 573 in North Carolina, and 2,379 in Texas. Of this population, researchers have identified a sample population of 330 Texas Agricultural teachers, 230 North Carolina Agricultural teachers, and 121 Colorado Agricultural teachers. As of January 1, 2023, all agricultural teachers in each state were selected for the sampling frame.

This research employed a descriptive exploratory research design in the form of a close-ended survey to collect data. This approach was used to determine decision points related to careers, teacher demographics, teacher entry type, FFA membership, altruistic, intrinsic, and extrinsic motivational factors. A questionnaire was created in Qualtrics to access teachers in Colorado, North Carolina, and Texas. These three states were included because of the variations in a teacher's expectations in each state throughout the year, such as livestock shows, career and leadership development events (CDE, LDE), and conferences. An online survey proved to be the most effective tool for gathering data across the three states.

Population

The target population for this study is all of the agricultural teachers in Colorado, North Carolina, and Texas. These states were selected because of the researcher's intimate working knowledge of the state's agriculture education programs. She was a member of the Colorado FFA organization and worked closely with her advisor to learn about the Colorado agriculture education system. She received teaching certification and completed her student teaching with Texas, and is currently studying for her master's degree in agriculture education in North Carolina. With this background knowledge, the researcher was equipped to develop questions tailored toward the agriculture educator's potential background.

Across the three states, all teacher contact information was gained through publicly available website directories. The Colorado agriculture teacher list was obtained through judgingcard.com, a publicly available website. The Texas agriculture teacher list was obtained through area FFA area directories (http://www.area1ffa.ffanow.org/default.aspx?ID=568, http://www.area3.ffanow.org/default.aspx?ID=7050, https://area4ffa.ffanow.org/default.aspx?ID=65962, https://area5ffa.com/directory.php, https://www.area6ffa.org, https://area8.ffanow.org/default.aspx?ID=16694, http://www.area11.ffanow.org/default.aspx?ID=55298, https://area12.ffanow.org/default.aspx?ID=53500) which are publicly available for most areas; areas 2, 7, 9, and 10 were not available through their area websites. Therefore, teacher information for these areas was gained through Judging Card (https://www.judgingcard.com), which is also a publicly available website. Finally, the list of agricultural teachers in North Carolina was obtained through the agriculture teacher directory on the North Carolina FFA Association website (https://ncffa.org/agricultural-education/nc-ag-ed-teacher-directory/), which is publicly available.

The population was surveyed because they have varying elements contributing to teacher recruitment and retention. These variations include things such as the yearly program requirements, program curriculums, and certification assessment type.

All three states participate in the national Teach Ag Campaign, supported by the National Council for Agricultural Education (the Council) and the National Association of Agricultural Educators (NAAE). Additionally, they participate in the State Teach Agriculture Results (STAR) program.

There are no additional parameters for individual agriculture educators participating in the study. Individuals were randomly selected for participation in the survey.

Table 1

Agriculture Teacher Certification and Requirement Variation by State

	NC	CO	TX
Teacher Certification			
Praxis Exam	No	Yes	Yes
Ed TPA	Yes	No	(Pilot Phase Spring 2020-2023)
Lateral Entry Option	Yes, LEAP	Yes, Boces ATLP	Yes, ACP
Bachelor’s degree required	Yes	Yes	Yes
Teaching certificate grades	6-12	7-12	6-12
GPA Minimum	2.75	2.75	Varies by institution lowest 2.00 _WT
Number of Agriculture Teacher Certification institutions in the State	5	1	11
Common Contract Requirements and Classroom instruction			
Contract length	12 months, school can apply for exemption	10 months, schools can offer extensions (30 days typically)	12-, 11-, or 10-month contracts
Number of State standardized Courses	21	54	32
Number of State Staff	6	3	7
Number of Events Annually Above the Local Level			
Livestock Shows	2	2	8
CDE Contests	10	4	64
LDE Contests	N/A	2	15
Conferences/Conventions	9	2	20
Camps	8	0	17

Table 1 (continued)

Agriculture Teacher Certification and Requirement Variation by State

LEAP - Licensure in Education for Agricultural Professionals

Boces ATLP - Board of Cooperative Educational Services Alternative Teacher Licensure Program

ACP - Alternative Certificate Program

Sampling Frame

The sampling frame identified for this study was all agricultural teachers in the states of Colorado, North Carolina, and Texas. There are roughly 175 agricultural teachers in the state of Colorado, 573 agricultural teachers in North Carolina, and 2,379 agricultural teachers in Texas.

Sampling Technique

Once the sampling frame was identified, the researcher randomly sampled the frame of each state. The basis of the identified sample population is to receive a 95% confidence level with only a 5% margin of error. Randomized sampling is imperative for this study since it allows an equal likelihood for the entire population to be sampled, decreasing the likelihood of skewed data. In order to fulfill the randomization, a random number generator within Excel was used.

The researcher added all agricultural teachers from each state into an excel spreadsheet, with each state having its own array. The spreadsheet included the teacher's first and last name, the school where they currently teach, and their email address. The Texas list was initially organized and color-coded based on area, allowing researchers to ensure that all areas were represented in the initial creation of the list. The North Carolina Teacher list was initially listed in order by the teacher's last name. The Colorado school list was slightly different, as it included chapter numbers and was listed in numerical order by state-assigned FFA chapter number.

Once all lists were created entirely, the researcher added columns B, C, and D. Column B was filled with the function =RAND(), which generated random numbers for every person in the population. The list was then copied, and special value was pasted into column D. By utilizing the special value paste, the researcher ensured the numbers would no longer change as the document was edited and that there was no bias in the teacher selection.

The sample size was then calculated utilizing Qualtrics sample size calculator and confirmed by hand calculations that 330 teachers were needed from Texas, 230 from North Carolina, and 121 from Colorado. Once the sample size was confirmed, the sheets were sorted from A to Z based on column D. Next the number "1" was placed in column C for every selected teacher. The list was then sorted to determine if any duplicate emails or missing emails were included in the sample. If there was, column C's number "1" was removed and replaced with a "0". Once all duplicates or missing email addresses were located, the sheet was then sorted again from A to Z based on column D, and four teachers were added to the sample list for Texas, two teachers for North Carolina, and one for Colorado to adjust for the missing emails and duplicate email address. With the primary motivator of this research being to determine how agriculture educators are drawn to their career path, this sampling technique allows researchers to categorize the characteristics and determine their importance and how they influence people to become educators.

Data Collection

The initial survey notification was emailed to all participants on January 27, 2023, utilizing the Qualtrics directory and email correspondence tool. This tool allowed the researcher to track the levels of survey completion, who opened the email, who started the survey, who finished the survey, if the email bounced, why it bounced, or if the recipient manually blocked the researcher's emails. From downloading the distribution reports, the researcher noted 22 emails bounced back for the selected Texas educators, 12 for North Carolina, and 7 for Colorado.

To ensure the anticipated sample size, the spreadsheet was sorted from A to Z based on column D to ensure it was in the same order as when the teachers were initially selected, and corresponding numbers of teachers were added to the sample from each state. Researchers made a note of who these educators were for additional analytical purposes. The researchers then sent the survey to the additional teachers and had only four bounced emails from Texas, while North Carolina and Colorado were all sent. Four teachers were added to the selected Texas teacher population list and noted for additional analysis.

All selected teachers who had emails bounce were then removed from the study, as there was no possible way for us to attempt to contact them. For reference purposes, their number 1 in column C of the spreadsheet was changed to a "0", and we noted that they were removed and included the specific reason as it appeared on the Qualtrics report.

Questionnaire

The questionnaire consisted of three tiers of information: personal background, agricultural background, and factors influencing educators' decision to teach. The questionnaire is in the format of Likert type through multiple choice, scale, and “yes” or “no” dichotomous questions that most accurately described the participant's experience related to the questions. Developing an environment for the most accurate and straightforward responses possible. Several questions required participants to provide a short answer. For example, if participants answered “no” to the question "When you graduated college, was your major agriculture education?" they were prompted with the question "What was your major when graduating college?"

Tier one items evaluated the personal background of all the participants to determine if intrinsic factors within the participant's personal life contributed to their decision to teach. The demographic tier of items is also responsible for obtaining personal information about participants' gender, race, ethnicity, and entry to teaching. This information helped the researcher develop a context for the research, helping them to categorize the intrinsic and extrinsic factors contributing to decision-making.

The second tier of research is based on the agricultural and agriculture education backgrounds of the participants. These items are based on individual involvement in 4-H, the National FFA Organization, personal agricultural interests, supervised agricultural experiences (SAE), career development events (CDE), leadership development events (LDE), and non-organizational agricultural experiences. This tier of items directly evaluated the involvement of each participant and how agriculture impacts their decision to teach. The researcher expects that many educators have different levels of experience in agriculture. Opening the survey up to all three states allows for various answers helping researchers conclude if these items impact educators' decision to teach agriculture in the high school and middle school setting in various states. Participants were prompted with a question asking if they were ever involved in 4-H or FFA at any point in their youth. If they answered “yes,” participants were prompted with a question where they were asked to provide the number of years they participated and additional questions regarding their level of participation in FFA. These questions were only programmed to prompt if the participant was involved in FFA to ensure participants who did not participate in FFA in middle or high school did not feel discouraged from completing the questionnaire.

The final tier of items involved career-related motivators, including but not limited to family members who teach, mentors, teacher recruitment programs, university recruitment programs, and career stability. These are only a few examples of what the questionnaire included however; this is the basis of the third tier.

The three tiers of questions centered on six constructs, which consisted of potential factors in a person's decision to teach agriculture, influential FFA activities, recruitment factor impact, recruitment activities influence on the decision to teach, influential people, agriculture clubs, and organizations, and impact on the decision to teach. Additionally, the study includes questions beyond those present in the five constructs; those questions will be analyzed individually.

The instrument utilized for this study was created specifically for this study by the researcher (Appendix A). The reason is that the instrument is created with the results in mind, so there are limited misinterpretations within the results. Therefore, the goal was to create an optimal setting for researchers to obtain accurate results directed directly toward answering the research questions.

Validity of the Questionnaire

A panel of Agricultural and Extension Education experts at North Carolina State University reviewed and approved the instrument. The panel consisted of four faculty members and one doctoral student in the Agricultural and Human Sciences Department who have an extensive history in agricultural education and agricultural teacher education to ensure the instrument was only observing information necessary to support the purpose of the study and ensure the instrument's validity. From the panel of experts, expert one has three years of high school and middle school agriculture education experience and nine years of teacher-educator experience at North Carolina State University. Expert two has three years of high school agriculture education experience and twelve years of experience in agriculture teacher education in three states. Expert three has three years of high school agriculture education and sixteen years of agriculture teacher educator experience in two states. Expert four has five years of high school agriculture education and nineteen years of agriculture teacher education experience in two states. Expert five is a current doctoral student in the Department of Agriculture and Human Sciences at North Carolina State University; in addition to their past and current research in agriculture education, they also have eight years of high school agriculture education experience in North Carolina. The panel of experts received an email with the survey instrument attached and were asked to review it for face, content, and construct validity. The panel of experts then reviewed and approved the instrument for face, content, and construct validity.

Reliability of the Questionnaire

The reliability of an instrument is determined by the ability of the results to be repeatable, dependable, and constant (Ary et al., 2006). The instrument was pilot tested with a convenient sample of New York agricultural teachers. The instrument was emailed to Shari Lynn Lighthall at Cornell University, who dispersed it to the New York Agriculture Teacher listserv. Of the teachers who were sent the questionnaire, 41 completed the pilot survey. The results of this pilot survey were analyzed through an SPSS Cronbach’s Alpha reliability analysis to ensure the results that have been generated are reliable. Researchers also measured Cronbach's alpha to ensure internal consistency within the instrumental results with the combination of a Statistical Package for the Social Sciences (SPSS) and Cronbach's alpha.

Reliability was determined for construct one ($\alpha = 0.722$), construct two ($\alpha = 0.763$), construct three ($\alpha = 0.833$), construct four ($\alpha = 0.596$), construct five ($\alpha = 0.288$), and construct six ($\alpha = 0.433$) through the pilot instrument. Construct five reliability was calculated; however, due to a lack of participation during the pilot phase, this analysis was deemed inconclusive.

Construct six showed a low level of alpha (α = 0.433); however, the items which would have been deleted were important to the basis of the study, and the researcher decided to include the items in the questionnaire.

Post-hoc reliability was determined for construct one (α = 0.668), construct two (α = 0.589), construct three (α = 0.873), construct four (α = 0.733), construct five (α = 0.880), and construct six (α = 0.582).

Ethical Concerns

This research involves the interactive participation of human subjects, therefore requiring approval of the NC State Institutional Review Board (IRB). In order to receive approval for the study, the researcher provided confidentiality to all participants involved, as well as protection of their privacy and identifiable information. The only portion of the information that can potentially be tied back to the participants is their educational history regarding how they entered the teaching career pathway, the state from which they are employed, their names, email, and the school in which they are currently employed. This information is only available to the researcher and her advisor and will not be publicly available or for secondary use. The individuals' names, emails, and schools will be stored as de-identified information. The participants' names will correlate to a number on a separate sheet from the data being analyzed. This information will also be in a password-protected folder only available to the research team.

When considering the ethics of surveying, the primary concern of the researchers is to ensure participants that their information will only be reviewed by the research panel and never distributed for secondary use. It is also the responsibility of the researchers to gain the informed consent of all participants. This will be done by gaining an electronic signature before the survey begins after the participant has been informed of the use of the information, the purpose of the study, the inurement that the data will remain de-identified and not be distributed for secondary use, as well as that the data being collected is only for the use of the research team, and directly relates to the purpose of the study.

Consent

The study was initially submitted to the IRB at NC State on December 12, 2022. The documentation was returned for revision and resubmitted on January 9, 2023. The documentation was returned one final time and resubmitted on January 12, 2023, and accepted on January 13, 2023

The informed consent form (Appendix B) utilized for this study was included in all email correspondence to participants and was available for download each time. The initial question on the questionnaire instructed participants to digitally sign, agreeing that they had read and understood the consent form. They also understand that they can exit the study and revoke consent at any time during the study. Participants could not continue to the study if they did not sign the first page of the survey.

Data Collection Procedure

Dillman (2000) suggests that researchers can increase responses substantially through four primary contacts when using internet surveys. Dillman (2014) was used as a framework for the timeline of the survey. It is suggested that initial contact letters have made little to no difference in response rates. Moreover, the most important thing is to personalize the messages each time the participants are contacted to encourage the selected population to participate in the study.

Initial email correspondence (Appendix C) was sent to participants Monday, January 23, 2023. In this initial email, participants received a copy of the study consent form, which they could download, a description, and a reason for the study. Participants were informed through email and the consent form that all information would be analyzed in the aggregate and that no personal information would be released to the public.

The second contact (Appendix D) to participants was sent Thursday, January 26, 2023; in this email, participants received an additional copy of the informed consent form, which was downloadable. The participants were again informed of the purpose of the study and its potential impacts on Agricultural Education. They were informed that no personal information such as name, email, and school would be shared upon publication of the study.

The third correspondence to participants (Appendix E) was sent out Monday, January 30, 2023. In this email, participants received an additional downloadable copy of the informed consent form. They were informed of the importance of the study and the impact it can have on recruitment methods for agriculture educators, as well as the importance their participation has on completing the researcher's thesis.

The fourth contact to participants (Appendix F) was sent on February 2, 2023. Participants received an additional downloadable copy of the informed consent form. They were asked to please participate in the study as it holds extreme importance in completing the researcher's thesis and the career field of agriculture education.

The final attempt to contact participants (Appendix G) was sent on February 6, 2023. Participants received an additional downloadable copy of the informed consent form. They were asked to participate in the study as it holds high importance to the researcher and the industry.

Analysis of Data

Data collected from participants were entered into an excel spreadsheet utilizing a numeric code to account for answers in a format analyzed (Appendix F). All responses from participants were analyzed using the Excel code and were time-stamped in the order in which they were received. The data was analyzed using the SPSS package 1.0.0.1406 for Mac.

SPSS was utilized to analyze all variables of this study. Descriptive statistics were used to analyze all constructs. Each construct was then broken down further by gender, racial identity, state, teaching certificate obtainment method, and FFA membership to determine the level of influence by individual demographic items. Further analysis was conducted to determine the connectivity of questions by using a correlation analysis of each construct. Data correlation was conducted for all six constructs by utilizing Bivariate Correlation charts created by SPSS.

Response Rate

Response rate for this study was broken down by state as well as overall, to determine accuracy of reporting for each state. The target sample for Colorado consisted of 121 agricultural teachers, 130 agricultural teachers in North Carolina, and 330 agricultural teachers in Texas. Of this sample, 252 participants completed the survey, 63 from Colorado, 108 from North Carolina, and 81 from Texas. Therefore creating an overall response rate of 37.4%, 52.1% response rate from Colorado, 47.0% from North Carolina, and 24.8% from Texas.

Non-Response Error

The non-response error was evaluated by comparing early and late responders. This included early respondents, defined by rounds one through four (n=242), and late respondents, defined by rounds five (n=33). A chi-square test of independence was used to determine the relationship between early and late responses. The only significant correlations between response rounds were Agricultural Communicators (p = -0.26)(Table 8.04), Agriculture Educators club (p = -0.22) (Table 8.04), and College Recruitment Fairs (p = 0.23)(Table 6.04). The evaluation was conducted on the six constructs in the research. By considering the primary aspects of the questions to determine if there are relations between the late and early respondents, researchers will be better able to determine if these will apply to non-respondents.

Use of Findings

The objective tiers of this study will answer all the questions proposed in this study extensively and hopefully open the window to the additional study of the same type to evaluate all states in this manner and allow for it to become a national evaluation. The information will be available in teacher recruitment and retention programs, university teacher recruitment, and high school career counseling. The hope is that this information will help close the gap of needed teachers in the states being observed and nationwide.

Chapter Summary

Chapter three contains details regarding the methodology and techniques utilized throughout this study to explore career decision-making and quality of requirement activity based on agricultural teachers' opinions on the level of influence. The population of this study was people currently teaching agriculture in Colorado, North Carolina, and Texas. Participants for this study were randomly selected by utilizing a random number generator. Participants of this study were contacted initially on January 23, 2023. Participants were removed from the survey list as they completed the study to ensure they were not being contacted multiple times. Data from all five attempts were cleaned (participant-identifying data was removed), uploaded to SPSS, and coded. Data analysis consisted of comparing means of demographic data and construct questions; Bivariate Correlation data was utilized to determine the significance of each question.

CHAPTER 4: RESULTS AND FINDINGS

Introduction

There has been a shortage of agricultural teachers since 1917, which was the federal establishment of school based agricultural education (Eck & Edwards, 2012). This can result in program closures and an overall underrepresentation of agriculture in our schools. Most importantly, the current and persisting shortage of agricultural teachers impacts nobody quite as severely as our youth. To work towards a feasible resolution to this issue, it is important to better understand what factors are most impactful in our current agricultural teacher's decision to enter the career field. This research aimed to determine those impactful moments, events, and activities that lead agricultural teachers to pursue their career pathways. While studies such as Ismail and Miller (2021) have researched this before, research into what drives agricultural teachers on a multi-state level has not occurred. It is expected that this will vary by state, certification method, and gender and race identification, which are outlined in Chapter 1. The goal of this study is to better equip the academic community to find a meaningful resolution to the agricultural teacher shortage.

Demographic Variables

Demographic data were collected from participants to allow for further analysis. Of the data collected, descriptive statistics were calculated for gender, ethnicity/race identification, and years of teaching experience and compared across the states of Colorado, North Carolina, and Texas. Of the populations surveyed, 90% of all participants in Colorado (95.3%, n = 60), North Carolina (94.5%, n = 104), and Texas (90.2%, n = 74) identified as white or Caucasian (Table 1). The gender identification margin for this study identified that of the selected participants, Texas (50.06%, n = 113) was the only state with more male than female teachers (Table 1).

Table 2

Demographic Data of Participants by State

	NC		CO		TX		Total	
	n	%	*n*	%	*n*	%	*n*	%
Race/Ethnicity								
White	104	94.5	60	95.2	74	90.2	238	93.3
African American	2	1.8	0	0.0	1	1.2	3	1.2
Native American/Alaska Native	3	2.7	1	1.6	0	0.0	4	1.6
Asian	0	0.0	1	1.6	0	0.0	1	0.4
Other	1	0.9	1	1.6	7	8.5	9	3.5
Total	110	100.0	63	100.0	82	100.0	255	100.0
Gender								
Male	44	40.7	28	44.4	41	50.6	113	44.8
Female	64	59.3	35	55.6	40	49.4	139	55.2
Total	108	100.0	63	100.0	81	100.0	252	100.0

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. (NC *n* = 110, CO *n* = 63, TX *n* = 82, total *n* = 255)

In addition to demographic data, participants were asked questions regarding their educational history. Data were also collected to determine the highest level of education, if they are from the state they teach in, the method of certificate obtainment, and if they received their certification from the state they teach in. Of the population surveyed, Colorado (60.3%, *n* = 38), North Carolina (50.9%, *n* = 56), and Texas (67.1%, *n* = 53), over 50% of their population received their teaching certification concurrently with their bachelor's degree (Table 2). The average teaching experience was nine years. The average years of experience for Colorado was 7.56 years, North Carolina was 8.46 years, and Texas reported 11.17 years of experience.

It was also crucial for analysis to determine if the participants received their certification from the state they teach in. From this, it was determined that North Carolina (90.0%, *n* = 99) and Texas (91.5%, *n* = 75) had 90% or more of their teachers receive their certification from the state they teach in, while only 58.7% of Colorado teachers (*n* = 37) received their certificate from

Colorado (Table 2). There is only one agriculture teacher prep institution in Colorado, while each of the other states have multiple agriculture teacher preparation institutions. Another critical notation is that Texas (92.6% n = 75) is the only state above 90% when considering whether the participant is from the state in which they teach. While North Carolina is close at 87.2% (n = 95), and Colorado only has 65.1% (n = 41) of their teachers originating from Colorado (Table 2).

When considering the level of education of agricultural teachers in all states, roughly 63% of their teacher's highest level of education is a bachelor's degree. In comparison, in all states, Colorado (36.1% n = 22), North Carolina (36.4 n = 40), and Texas (34.1 n = 90), 34% or more of their teacher's highest level of education is their master's degree. Colorado was the only state that had no teachers in their population who did not have a doctoral degree (Table 3).

When participants were asked if agricultural education was their initial major when applying to college, 54.5% (n = 139) said no. From this it should be noted that Colorado had the largest percentage of their population of agricultural teachers who initially did not pursue agricultural education as their degree path for their bachelor's degree (60.3%, n = 38). However, 63.1% (n = 161) of all participants reported that agricultural education was their major when graduating college with their bachelor's degree. From this sample it was additionally found that Texas had the largest number of participants who changed their degree to agricultural education with 21 of their teachers reporting a change in major. Overall, 56 (22%) agricultural teachers in this study reported that they changed their major to agricultural education during their bachelors degree.

Table 3

Educational Background of Teacher Participants by State

	NC		CO		TX		Total	
	n	%	*n*	%	*n*	%	*n*	%
Obtained teaching certificate concurrently with the bachelor's degree								
No	54	49.1	25	39.7	26	32.9	105	41.7
Yes	56	50.9	38	60.3	53	67.1	147	58.3
Total	110	100.0	63	100.0	79	100.0	252	100.0
Earned teaching certificate in same state in which the teacher teaches								
No	11	10.0	26	41.3	7	8.5	44	17.3
Yes	99	90.0	37	58.7	75	91.5	211	82.7
Total	110	100.0	63	100.0	82	100.0	255	100.0
Grew up in the state in which they teach in								
No	14	12.8	22	34.9	6	7.4	42	16.6
Yes	95	87.2	41	65.1	75	92.6	211	83.4
Total	109	100.0	63	100.0	81	100.0	253	100.0
Highest level of education completed								
Bachelor's degree	69	62.7	39	63.9	52	63.4	160	63.2
Master's degree	40	36.4	22	36.1	28	34.1	90	35.6
Doctoral degree	1	0.9	0	0.0	2	2.4	3	1.2
Total	110	100.0	61	100.0	82	100.0	253	100.0
When applying to college, was agriculture education your initial degree path?								
No	60	54.5	38	60.3	41	50.0	139	54.5
Yes	50	45.5	25	39.7	41	50.0	116	45.5
Total	110	100.0	63	100.0	82	100.0	255	100.0
When you graduated college, was your major agriculture education?								
No	43	39.1	25	39.7	26	31.7	94	36.9
Yes	67	60.9	38	60.3	56	68.3	161	63.1
Total	110	100.0	63	100.0	82	100.0	255	100.0
Did you change majors during your bachelor's degree to agriculture education?								
No	90	81.8	48	76.2	61	74.4	199	78.0
Yes	20	18.2	15	23.8	21	25.6	56	22.0
Total	110	100.0	63	100.0	82	100.0	255	100.0

Table 3 (continued)

Educational Background of Teacher Participants by State

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

(NC *n* = 110, CO *n* = 63, TX *n* = 82, total *n* = 255)

Table 4

FFA Activity Participation Level of Teachers by State

	NC		CO		TX		Total	
	n	%	*n*	%	*n*	%	*n*	%
Have an SAE								
No	10	12.0	5	10.4	6	7.6	21	10.0
Yes	73	88.0	43	89.6	73	92.4	189	90.0
Total	83	100.0	48	100.0	79	100.0	210	100.0
Highest Level CDE Competed in								
None	10	12.0	2	4.2	8	10.3	20	9.6
District	1	1.2	4	8.3	6	7.7	11	5.3
Area	2	2.4	0	0.0	26	33.3	28	13.4
Region	6	7.2	0	0.0	2	2.6	8	3.8
State	47	56.6	34	70.8	29	37.2	110	52.6
National	17	20.5	8	16.7	7	9.0	32	15.3
Total	83	100.0	48	100.0	78	100.0	209	100.0
Highest Level LDE Competed in								
None	34	41.5	7	14.6	13	16.7	54	26.0
District	3	3.7	15	31.3	17	21.8	35	16.8
Area	1	1.2	1	2.1	24	30.8	26	12.5
Region	17	20.7	3	6.3	1	1.3	21	10.1
State	23	28.0	20	41.7	22	28.2	65	31.3
National	4	4.9	2	4.2	1	1.3	7	3.4
Total	82	100.0	48	100.0	78	100.0	208	100.0

Table 4 (continued)

FFA Activity Participation Level of Teachers by State

	NC		CO		TX		Total	
	n	%	*n*	%	*n*	%	*n*	%
Highest Level Agriscience Fair Competed in								
None	79	96.3	47	97.9	71	89.9	197	94.3
District	1	1.2	0	0.0	1	1.3	2	1.0
Area	0	0.0	0	0.0	1	1.3	1	0.5
Regional	0	0.0	0	0.0	2	2.5	2	1.0
State	1	1.2	1	2.1	2	2.5	4	1.9
National	1	1.2	0	0.0	2	2.5	3	1.4
Total	82	100.0	48	100.0	79	100.0	209	100.0
Highest Level of FFA Office Held								
None	19	22.9	6	12.5	33	41.8	58	27.6
District	32	38.6	24	50.0	39	49.4	95	45.2
Area	16	19.3	4	8.3	5	6.3	25	11.9
Regional	11	13.3	1	2.1	2	2.5	14	6.7
State	5	6.0	13	27.1	0	0.0	18	8.6
Total	83	100.0	48	100.0	79	100.0	210	100.0
Highest FFA Degree Earned								
No degree	9	10.8	2	4.2	5	6.3	16	7.6
Greenhand	4	4.8	0	0.0	4	5.1	8	3.8
Chapter	10	12.0	10	20.8	16	20.3	36	17.1
State	33	39.8	11	22.9	39	49.4	83	39.5
American	27	32.5	25	52.1	15	19.0	67	31.9
Total	83	100.0	48	100.0	79	100.0	210	100.0
Highest Level of Proficiency Recognition Received								
None	42	50.6	12	25.0	32	40.5	86	41.0
Chapter	23	27.7	15	31.3	37	46.8	75	35.7
State	15	18.1	18	37.5	10	12.7	43	20.5
National	3	3.6	3	6.3	0	0.0	6	2.9
Total	83	100.0	48	100.0	79	100.0	210	100.0

Table 4 (continued)

FFA Activity Participation Level of Teachers by State

	NC		CO		TX		Total	
	n	%	*n*	%	*n*	%	*n*	%
Highest Level of Star Award Recognition Received								
None	62	74.7	27	56.3	34	43.0	123	58.6
Chapter	20	24.1	15	31.3	30	38.0	65	31.0
State	1	1.2	5	10.4	15	19.0	21	10.0
National	0	0.0	1	2.1	0	0.0	1	0.5
Total	83	100.0	48	100.0	79	100.0	210	100.0

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. (NC *n* = 110, CO *n* = 63, TX *n* = 82, total *n* = 255)

This study consisted of 255 people, where 77.7% (*n* = 48) of Colorado, 76% (*n* = 83) of North Carolina, and 96.3% (*n* = 79) of Texas participants participated in FFA for at least one year. At least 88% of participants who were FFA members in high school also had an SAE while in FFA.

Participants were asked to identify the level of participation in various FFA competitions and awards received to determine how active participants were in FFA. Colorado agricultural teachers have the highest state-level participation among the population at 70.8% (*n* = 34). At the same time, North Carolina has the most teachers who have participated in Career Development Events, as well as the most teacher to compete at the National level in Career Development Events. When considering the portion of the population who participated in the Agriscience Fair, very few teachers participated at any level, with 94.3% of the population never competing in the Agriscience Fair. However, Texas had the highest participation level, with eight teachers who had participated in the Agriscience fair at any level.

Information regarding the highest level of office held reported that 86.85% of participants held an office position in FFA. However, this information is deemed inaccurate, as the Chapter level office was not included in this study, and it cannot be determined if the level of participation reported is correctly represented.

Considering the highest level of FFA degree earned by FFA members, only 7.6% (*n* = 16) of members earned no degree. Additionally, over 31% (*n* = 67) *of* participants earned an American or State degree. Texas has the most state degree recipients at 49.4% (*n*=39), while Colorado has the most American Degree recipients at 52.1% (*n* = 25).

Proficiency recognition data divulged that North Carolina was the only state where less than 50% (*n*=41)of their teachers earned a proficiency award at any level. In addition, Colorado had the most National Proficiency awards per population, although it is the same number (*n* = 3)*as* North Carolina.

When considering star awards, most of the population never earned one. In addition, Texas (56.9%, *n* = 27) has the most teachers with Star Awards. In contrast, Colorado and North Carolina have the same number of agricultural teachers with Star degrees (*n* = 21); however, because of the difference in population size, Colorado has the most star degrees per population compared to North Carolina. Additionally, it should be acknowledged that this data is not inclusive of participant information for those nominated as finalists for star degrees.

Construct 1: Factors Affecting Agricultural Teacher's Decision to Teach Agriculture

When considering factors that affect agricultural teachers' decisions to enter the career field, it was noted that the altruistic factor of enjoying the impact agricultural teachers have on their students was the most positively influential factor motivating agricultural teachers to teach. Additionally, it was observed that small classes at the university level and job availability were positive influences on career decision-making; however, they were only slightly positive for all agricultural teachers included in this study.

Table 5

Factors Affecting Agricultural Teacher's Decision to Teach Agriculture

	n	*M*	SD
I enjoyed seeing the impact an agriculture teacher can have on their students.	252	2.43	0.936
Sense of community in the field of agriculture	252	2.15	1.137
Extended contracts	237	1.02	1.323
A large number of available jobs	238	0.75	1.304
Small class sizes at the university level	216	0.73	1.195

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 = High Negative Influence; -2 = Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 High Positive Influence.

Table 5.01

Means of Factors Affecting Agricultural Teacher's Decision to Teach Agriculture in Colorado

	n	*M*	SD
I enjoyed seeing the impact agriculture teacher have on their students.	60	2.50	0.792
Sense of community in the field of agriculture	59	2.27	0.98
Your high school agriculture teacher	48	2.17	1.26
Extended contracts	54	1.09	1.391
Small class sizes at the university level	47	0.94	1.309
A large number of available jobs	54	0.69	1.477

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 5.02

Means of Factors Affecting Agricultural Teacher's Decision to Teach Agriculture in North Carolina

	n	*M*	SD
I enjoyed seeing the impact agriculture teacher have on their students.	104	2.36	0.934
Sense of community in the field of agriculture	106	2.11	1.045
Extended contracts	100	1.01	1.291
A large number of available jobs	104	0.74	1.262
Small class sizes at the university level	93	0.69	1.123

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 5.03

Means of Factors Affecting Agricultural Teacher's Decision to Teach Agriculture in Texas

	n	*M*	SD
I enjoyed seeing the impact agriculture teacher have on their students.	80	2.54	0.871
Sense of community in the field of agriculture	79	2.13	1.254
Extended contracts	77	0.95	1.327
A large number of available jobs	74	0.88	1.182
Small class sizes at the university level	70	0.63	1.23
Valid n (listwise)	67		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 = High Negative Influence; -2 = Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 High Positive Influence.

Through correlation analysis, it can be concluded that all factors applying to the decision to become an agriculture teacher included in this study were statistically significant in correlation to each other.

Table 5.04

Correlations Between Factors Affecting Agricultural Teacher's Decision to Teach Agriculture

	1	2	3	4	5
1. A large number of available jobs	---	.373*	.323*	.264*	.250*
2. Extended contracts		---	.379*	.160*	.211*
3. Small class sizes at the university level			---	.268*	.262*
4. I enjoyed seeing the impact agricultural teachers have on their students.				---	.530*
5. Sense of community in the field of agriculture					---

*. Correlation is significant at the 0.01 level (2-tailed).

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Through correlation analysis, it can be concluded that all factors applying to the decision to become an agriculture teacher included in this study were statistically significant in correlation to each other.

Table 5.05

Factors Affecting Agricultural Teachers Decision to Teach Agriculture by State.

In what state are you currently teaching?		A large number of available jobs	Extended contracts	Small class sizes at the university level	I enjoyed seeing the impact agriculture teacher have on their students.	Sense of community in the field of agriculture
North Carolina	*M*	.74	1.01	.69	2.36	2.11
	n	104	100	93	104	106
	SD	1.262	1.291	1.123	.934	1.045
Colorado	*M*	.69	1.09	.94	2.50	2.27
	n	54	54	47	60	59
	SD	1.477	1.391	1.309	.792	.980
Texas	*M*	.88	.95	.63	2.54	2.13
	n	74	77	70	80	79
	SD	1.182	1.327	1.230	.871	1.254
Total	*M*	.77	1.01	.72	2.45	2.16
	n	232	231	210	244	244
	SD	1.287	1.322	1.202	.881	1.100

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = North Carolina, m^b = Colorado, m^c = Texas

When analyzing the factors affecting agricultural teachers decision to teach data by state, Colorado (m^b = 0.94) agricultural teachers were more influenced to become agricultural teachers due to the small class sizes they would have at university than North Carolina (m^a = 0.69) and Texas (m^c = 0.63) agricultural teachers. While all other categories demonstrated similar importance to all three states, it is noted that teachers are more positively influenced by the impact they can have on students (*m* = 2.45) and the sense of community in the agricultural field (*m* = 2.16) than they are by all other categories in this construct.

Table 5.06

Means of Factors Affecting Agricultural Teacher's Decision to Teach Agriculture by Gender Identification

Gender Identification		A large number of available jobs	Extended contracts	Small class sizes at the university level	I enjoyed seeing the impact agriculture teacher have on their students.	Sense of community in the field of agriculture
Male	*M*	.67	1.19	.61	2.28	2.13
	n	103	107	103	113	112
	SD	1.271	1.267	1.190	.968	1.095
Female	*M*	.84	.86	.84	2.58	2.17
	n	129	125	109	133	134
	SD	1.308	1.370	1.203	.771	1.100
Total	*M*	.77	1.01	.73	2.44	2.15
	n	232	232	212	246	246
	SD	1.292	1.331	1.200	.878	1.096

Note. Tabular data totals may differ from each state's ***n*** due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = females, m^b = males, *m* = total

When considering gender regarding the factors driving people to become agricultural teachers, males were more positively influenced by extended contracts (m^b = 1.19) than females (m^a = 0.86). However, female teachers were more positively influenced to become agricultural teachers (m^a = 0.84) than males (m^b = 0.67) due to a large number of jobs available, the impact they witnessed in other agricultural teachers (m^a = 2.58, m^b = 2.28). In a comparison, females (m^a= .84) and males (m^b= .61) were relativity equally motivated by the small class sizes they would have, the number of jobs available (m^b = .67, m^a = .84), and the sense of community felt in agriculture (m^b = 2.13, m^a = 2.17). It is essential to consider that when breaking down by items, all categories, both males and females, are most positively influenced by the impact agricultural teachers have on students (m = 2.45) and sense of community in agriculture (m = 2.16)

Table 5.07

Means of Factors Affecting Agricultural Teacher's Decision to Teach Agriculture by Certificate Obtainment Method

Did you obtain your teaching certificate as a pathway to your bachelor's degree?		A large number of available jobs	Extended contracts	Small class sizes at the university level	I enjoyed seeing the impact agriculture teacher have on their students.	Sense of community in the field of agriculture
No	*M*	.54	.89	.36	2.28	2.01
	n	89	88	74	97	99
	SD	1.357	1.385	1.093	.987	1.191
Yes	*M*	.90	1.08	.91	2.57	2.27
	n	144	145	139	148	146
	SD	1.233	1.288	1.213	.775	1.021
Total	*M*	.76	1.01	.72	2.45	2.17
	n	233	233	213	245	245
	SD	1.291	1.326	1.199	.875	1.098

Table 5.07 (continued)

Means of Factors Affecting Agricultural Teacher's Decision to Teach Agriculture by Certificate Obtainment Method

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = no, m^b = yes, m = total

Small classes were notably less influential for people who did not receive their license through their bachelor's degree pathway (m^a =.36) than their counterparts who did receive their certification with their bachelor's degree (m^b =.91). While people who did receive their license concurrently with their bachelor's degree were more positively influenced by the impact agricultural teachers have on their students (m^a = 2.28, m^b = 2.57), the number of jobs available in the career field (m^a = .54, m^b = .90), as well as the sense of community demonstrated in the agriculture community (m^a = 2.01, m^b = 2.27).

Table 5.08

Means of Factors Affecting Agricultural Teacher's Decision to Teach Agriculture by Race/Ethnicity Identification

Race/Ethnicity identification		A large number of available jobs	Extended contracts	Small class sizes at the university level	I enjoyed seeing the impact agriculture teacher have on their students.	Sense of community in the field of agriculture
White	*M*	.72	.97	.69	2.42	2.16
	N	220	221	201	232	232
	SD	1.287	1.328	1.182	.889	1.103
Other	*M*	1.47	1.71	1.31	2.81	2.19
	N	15	14	13	16	16
	SD	1.125	1.139	1.316	.544	.981
Total	*M*	.77	1.02	.72	2.45	2.16
	N	235	235	214	248	248
	SD	1.288	1.327	1.196	.875	1.094

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = White, m^b = other, m = total

Due to a lack of participation from all other race/ethnic identifying participants, all data will be analyzed as white and other to develop an accurate data pool. Through comparison, it was observed that white participants had a less positive outlook on all categories than all other participants. Some of the more remarkable differences include jobs available (m^a =.72, m^b =1.47), extended contracts (m^a =.97, m^b=1.71), small class sizes at university (m^a =.69, m^b =1.31), and they enjoy seeing the impact made by agricultural teachers (m^a=2.42, m^b=2.81). In comparison, it should be noted that the sense of community in the agricultural field was almost equally impactful for all populations. The most impactful factor for all populations was the impact participants witnessed agricultural teachers making, with all non-white participants having an overall rating of m^b=2.81 on a -3 to +3 scale, with a low standard deviation of .875.

Table 5.09

Means of Factors Affecting Agricultural Teacher's Decision to Teach Agriculture by FFA Membership

FFA Membership		A large number of available jobs	Extended contracts	Small class sizes at the university level	I enjoyed seeing the impact agriculture teacher have on their students.	Sense of community in the field of agriculture
No	*M*	.66	1.13	.54	2.06	1.76
	N	32	30	24	36	38
	SD	1.359	1.196	1.285	1.170	1.240
Yes	*M*	.79	1.00	.75	2.53	2.25
	N	203	205	190	213	211
	SD	1.278	1.345	1.186	.792	1.049
Total	*M*	.77	1.01	.72	2.46	2.17
	N	235	235	214	249	249
	SD	1.287	1.325	1.196	.870	1.092

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = No, m^b = Yes, m = Total

FFA and non-FFA members had similar views on the level of influence regarding the number of jobs available, extended contracts, and small class sizes at the university level. All of these factors garnered only a slightly positive influence in general. However, it should be noted that FFA members (m^b =2.53) had a more positive view of the impact that agricultural teachers had on their students than non-FFA members (m^a =2.06). Similarly, FFA members (m^b = 2.25) were more positively influenced by a sense of community in the field of agriculture when compared to non-FFA members (m^a = 1.76).

Construct 2: Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach

Table 6

The Influence of Recruitment Factors on Agricultural Teachers Decision to Teach

	n	*M*	SD
Had the program and clubs I wanted to be involved in	229	1.52	1.382
Scholarships	216	1.12	1.562
Proximity to home	241	0.97	1.631
My family attended that college	170	0.63	1.73
Recruitment booths at FFA events	199	0.54	1.201
Valid n (listwise)	143		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 6.01

Means of the Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach in Colorado

	n	*M*	SD
Scholarships	56	1.43	1.438
Had the program and clubs I wanted to be involved in	56	1.23	1.595
Proximity to home	58	0.64	1.662
My family attended that college	41	0.39	1.671
Recruitment booths at FFA events	44	0.07	1.336
Valid n (listwise)	38		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 6.02

Means of the Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach in North Carolina

	n	*M*	SD
Had the program and clubs I wanted to be involved in	92	1.71	1.288
Proximity to home	101	1.13	1.707
Scholarships	89	1.01	1.599
Recruitment booths at FFA events	84	0.67	1.134
My family attended that college	64	0.39	1.787
Valid n (listwise)	53		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 6.03

Means of the Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach in Texas

	n	*M*	SD
Had the program and clubs I wanted to be involved in	76	1.53	1.311
My family attended that college	61	1.03	1.703
Scholarships	67	1.01	1.619
Proximity to home	77	0.96	1.499
Recruitment booths at FFA events	67	0.69	1.157
Valid n (listwise)	52		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 6.04

Correlations Between Recruitment Factors

	1	2	3	4	5	6
1. In what state are you currently teaching?	---	.159*	.010	-.052	-.062	-.004
2. My family attended that college		---	.320*	.363*	.255*	.274*
3. Scholarships			---	.236*	.199*	.129
4. Proximity to home				---	.304*	.180*
5. Sense of community in the field of agriculture					---	.328*
6. Recruitment booths at FFA events						---

*. Correlation is significant at the 0.01 level (2-tailed).

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

When examining the entire sample, participants are increasingly more likely to be positively influenced to attend a college for agriculture education if another family member attended that college/university and they were positively influence by that experience. In correlation, participants are also more likely to be positively influenced if the school is in close proximity to home, they receive a scholarship, the school was present at recruitment booths at FFA events, or it had the clubs and organizations they were interested in.

Table 6.05

Means of the Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach by State

In what state are you currently teaching?		Recruitment booths at FFA events	My family attended that college	Scholarships	Proximity to home	Had the program and clubs I wanted to be involved in
North Carolina	*M*	.67	.39	1.01	1.13	1.71
	n	84	64	89	101	92
	SD	1.134	1.787	1.599	1.707	1.288
Colorado	*M*	.07	.39	1.43	.64	1.23
	n	44	41	56	58	56
	SD	1.336	1.671	1.438	1.662	1.595
Texas	*M*	.69	1.03	1.01	.96	1.53
	n	67	61	67	77	76
	SD	1.157	1.703	1.619	1.499	1.311
Total	*M*	.54	.63	1.12	.95	1.53
	n	195	166	212	236	224
	SD	1.211	1.746	1.568	1.635	1.385

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = North Carolina, m^b = Colorado, m^c = Texas

When comparing recruitment factors impacting participant's college choice by state, it can be concluded that participants in Colorado are less likely to be influenced by recruitment booths at FFA events (m^b =.07, m^a =.67, m^c = .69), and the proximity to their home (m^b =.64, m^a =1.13, m^c = .96). This is expected to be because there is only one institution in Colorado which has an agriculture education teacher certification program. Therefore, it is expected that some students will either have to travel a long distance to attend said university or go out of state for their certification, which can further explain the large number of agricultural teachers that were not originally certified in Colorado. Therefore, proximity to home is not something that can impact Colorado agricultural teachers. These Colorado teachers (m^b =.1.43), however, are more highly influenced by scholarships than agricultural teachers in North Carolina (m^a= 1.01) or Texas (m^c = 1.01). Texas (m^c = 1.03) agricultural teachers, however, are impressively more positively influenced to select their institution based on if their family attended the same institution than agricultural teachers in Colorado (m^b =.39) and North Carolina (m^a =.39). Overall, the most substantial positive influence among all states driving teachers to select their college, was the university having clubs and organizations they wanted to be involved in (m^b = 1.23, m^a = 1.71, m^c = 1.53).

Table 6.06

Means of the Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach by Gender Identification

Gender Identification		Recruitment booths at FFA events	My family attended that college	Scholarships	Proximity to home	Had the program and clubs I wanted to be involved in
Male	*M*	.44	.74	.82	.87	1.32
	n	94	82	93	103	101
	SD	1.169	1.439	1.553	1.678	1.449
Female	*M*	.60	.48	1.31	1.01	1.65
	n	103	86	120	135	124
	SD	1.215	1.963	1.533	1.595	1.319
Total	*M*	.52	.61	1.09	.95	1.50
	n	197	168	213	238	225
	SD	1.193	1.727	1.557	1.630	1.386

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = females, m^b = males, m = total

When considering the same criteria by gender rather than state, males and females have relatively similar methods for determining their institutions. Females, however, are increasingly more likely to attend an institution if they receive a scholarship to said institution ($m^a = 1.31$, $m^b = .82$). It is also to be noted that when breaking criteria down by gender, the university having clubs and organizations that the population wanted to be involved in remained the highest positive influence ($m = 1.51$).

Table 6.07

Means of the Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach by Teaching Certificate Obtainment Method

Did you obtain your teaching certificate as a pathway to your bachelor's degree?		Recruitment booths at FFA events	My family attended that college	Scholarships	Proximity to home	Had the program and clubs I wanted to be involved in
No	*M*	.38	.64	.94	1.00	1.48
	n	69	64	82	97	89
	SD	1.189	1.855	1.510	1.607	1.374
Yes	*M*	.62	.61	1.22	.91	1.54
	n	127	104	133	141	137
	SD	1.215	1.669	1.588	1.650	1.393
Total	*M*	.54	.62	1.11	.95	1.52
	n	196	168	215	238	226
	SD	1.208	1.737	1.561	1.630	1.383

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = no, m^b = yes, m = total

When participant's answers were broken down based on the method by which they obtained their teaching certificate, scholarships (m^a = .94, m^b = 1.22) and recruitment booths at FFA events (m^a = .38, m^b = .62) were of more importance to those who obtained their certificate with their bachelor's degree than those who received their certificate through alternative means. It is observed, however, that clubs and organizations held the most importance to both populations (m = 1.52)

Table 6.08

Means of the Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach by Race/Ethnicity Identification

Race/Ethnicity identification		Recruitment booths at FFA events	My family attended that college	Scholarships	Proximity to home	Had the program and clubs I wanted to be involved in
White	*M*	.54	.59	1.15	.95	1.48
	n	187	160	202	227	216
	SD	1.174	1.731	1.559	1.605	1.381
Other	*M*	.45	1.11	.46	1.15	2.17
	n	11	9	13	13	12
	SD	1.695	1.764	1.506	2.075	1.337
Total	*M*	.54	.62	1.11	.96	1.52
	n	198	169	215	240	228
	SD	1.203	1.732	1.561	1.630	1.384

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = White, m^b = other, m = total

When considering the same data by race and ethnicity identification, it is essential to note that the white participants were less positively influenced by every category except scholarship ($m^a = 1.15$, $m^b = .46$) and Recruitment booths and FFA Events ($m^a = .54$, $m^b = .45$). It is to be noted however there is little difference between the influence expressed by white participants and all other participants in the categories of recruitment booths at FFA events. The only categories with notable differences other than that previously mentioned are Family attending the college (m^a = .59, m^b = 1.11), proximity to home (m^a = .95, m^b = 1.15), and the institution having clubs and organizations the participants were interested in (m^a = 1.48, m^b = 2.17).

Table 6.09

Means of the Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach by FFA Membership

FFA Membership		Recruitment booths at FFA events	My family attended that college	Scholarships	Proximity to home	Had the program and clubs I wanted to be involved in
No	*M*	-.29	.67	.82	1.33	1.10
	n	17	21	34	40	31
	SD	1.047	2.008	1.466	1.716	1.680
Yes	*M*	.62	.61	1.17	.90	1.59
	n	181	148	181	200	197
	SD	1.190	1.696	1.581	1.612	1.320
Total	*M*	.54	.62	1.12	.97	1.52
	n	198	169	215	240	228
	SD	1.203	1.732	1.565	1.634	1.381

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = No, m^b = Yes, m = Total

FFA members were more positively influenced by factors such as recruitment booths at FFA events (m^b = 0.62), scholarships (m^b = 1.17), and the clubs and programs that FFA members wanted to be involved in (m^b= 1.59). Meanwhile, non-FFA members were more positively influenced by proximity to home (m^a = 1.33) which was the most influential factor for becoming an agricultural teacher among non-FFA members.

Construct 3: Recruitment Activities Influence on the Decision to Teach Agriculture

Table 7

Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach

	n	*M*	SD
FFA Camp	108	1.62	1.464
College Recruitment Fairs	109	0.97	1.462
Career Fairs	120	0.88	1.394
Washington Leadership Conference	56	0.73	1.794
Teach Agriculture Ambassador	60	0.43	1.577
Valid n (listwise)	42		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 7.01

Means of the Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach in Colorado

	n	*M*	SD
Washington Leadership Conference	15	1.00	2.478
FFA Camp	18	0.61	1.944
Career Fairs	27	0.30	1.54
College Recruitment Fairs	23	0.26	1.657
Teach Agriculture Ambassador	12	-0.50	2.023
Valid n (listwise)	9		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 7.02

Means of the Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach in North Carolina

	n	*M*	SD
FFA Camp	48	2.10	1.096
College Recruitment Fairs	51	1.31	1.049
Career Fairs	52	1.17	1.024
Washington Leadership Conference	22	1.09	1.377
Teach Agriculture Ambassador	26	0.85	1.12
Valid n (listwise)	16		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 7.03

Means of the Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach in Texas

	n	*M*	SD
FFA Camp	41	1.46	1.38
College Recruitment Fairs	33	0.88	1.709
Career Fairs	39	0.82	1.604
Teach Agriculture Ambassador	22	0.45	1.625
Washington Leadership Conference	18	0.11	1.53
Valid N (listwise)	17		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 7.04

Correlations Between Recruitment Activities

	1	2	3	4	5	6
1. Date Recorded	---	.151	.089	.048	.169	.232*
2. FFA Camp		---	.362*	.561*	.422*	.519*
3. Washington Leadership Conference			---	.685*	.606*	.564*
4. Teach Ag Ambassador				---	.697*	.774*
5. Career Fairs					---	.911*
6. College Recruitment Fairs						---

*. Correlation is significant at the 0.01 level (2-tailed).

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

When considering FFA related recruitment activity on the level of influence of participants to select agriculture education as their career choice, participants who deem FFA Camp as influential are significantly more likely to also be positively influenced by Washington Leadership Conference, Teach Agriculture Ambassadors, Career Fairs, and College Recruitment Fairs. Similarly, these participants are significantly negatively correlated by the state in which they teach. Meaning there is a significantly negative influence on these factors based on which state the participants teach in. When considering data response, one item had a significant correlation to the response date. This item was a positive correlation between College Recruitment Fairs between early and late responders.

Table 7.05

Means of the Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach by State

In what state are you currently teaching?		FFA Camp	Washington Leadership Conference	Teach Agriculture Ambassador	Career Fairs	College Recruitment Fairs
North Carolina	*M*	2.10	1.09	.85	1.17	1.31
	n	48	22	26	52	51
	SD	1.096	1.377	1.120	1.024	1.049
Colorado	*M*	.61	1.00	-.50	.30	.26
	n	18	15	12	27	23
	SD	1.944	2.478	2.023	1.540	1.657
Texas	*M*	1.46	.11	.45	.82	.88
	n	41	18	22	39	33
	SD	1.380	1.530	1.625	1.604	1.709
Total	*M*	1.61	.75	.43	.86	.95
	n	107	55	60	118	107
	SD	1.465	1.808	1.577	1.392	1.463

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = North Carolina, m^b = Colorado, m^c = Texas

The results varied greatly by state when considering the impact recruitment activities made on agricultural educators' decision to teach agriculture. FFA Camp was a highly positive experience for North Carolina (m^a = 2.10) agricultural teachers and a low but still positive experience for Colorado (m^b =.61) teachers, while Texas (m^c = 1.46) fell in the middle. Washington Leadership Conference was found to be less impactful for Texas (m^c = .11) agricultural teachers than the other states (m^b =1.00, m^a = 1.09). Texas (m^c = .88) and Colorado

(m^b = .26) agricultural teachers found College recruitment fairs to be positive experiences but knowingly less impactful than the North Carolina (m^a = 1.31) agricultural teachers found these experiences to be. Teach Agriculture Ambassadors were an experience of very little positive influence for all states (m^b = -.50, m^a = .85, m^c = .45). In fact, Colorado deemed it a negative experience. When considering Colorado as an individual, they found all categories, with the exception of Washington leadership conference, to be considerably less impactful experiences than North Carolina and Texas. Leading to the question of why are these experiences less important for this group. While also considering that North Carolina was more positively influenced by every experience than both states. Begging a similar question, why are recruitment activities more important in North Carolina for agricultural teachers than in Texas and Colorado?

Table 7.06

Means of the Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach by Gender Identification

Gender Identification		FFA Camp	Washington Leadership Conference	Teach Agriculture Ambassador	Career Fairs	College Recruitment Fairs
Male	*M*	1.50	.48	.22	.76	.81
	n	44	23	23	50	47
	SD	1.548	1.928	1.650	1.506	1.393
Female	*M*	1.68	.84	.50	.93	1.07
	n	62	32	36	69	61
	SD	1.423	1.687	1.502	1.298	1.504
Total	*M*	1.60	.69	.39	.86	.95
	n	106	55	59	119	108
	SD	1.472	1.783	1.554	1.386	1.456

Table 7.06 (continued)

Means of the Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach by Gender Identification

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = females, m^b = males, m = total

When considering influential recruitment activities by gender, males were positively influenced by all experiences; however, they were less positive regarding these experiences than their female counterparts in all categories. However, it is noted that Washington Leadership conference ($m^a = .84$, $m^b = .48$), teach agriculture ambassadors ($m^a = .22$, $m^b = .50$), and college recruitment fairs ($m^a = .81$, $m^b = 1.07$) had more impressive differences in responses from the surveyed population. It was also observed that of both populations, FFA Camp was the most positively influential recruitment activity ($m = 1.60$).

Table 7.07

Means of the Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach by Teaching Certification Obtainment Method

Did you obtain your teaching certificate as a pathway to your bachelor's degree?		FFA Camp	Washington Leadership Conference	Teach Agriculture Ambassador	Career Fairs	College Recruitment Fairs
No	*M*	1.58	.56	.00	.60	.93
	n	33	16	15	30	28
	SD	1.640	1.504	1.000	1.567	1.676
Yes	*M*	1.64	.80	.58	.97	.99
	n	74	40	45	90	81
	SD	1.400	1.911	1.712	1.328	1.392

Table 7.07 (continued)

Means of the Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach by Teaching Certification Obtainment Method

Did you obtain your teaching certificate as a pathway to your bachelor's degree?		FFA Camp	Washington Leadership Conference	Teach Agriculture Ambassador	Career Fairs	College Recruitment Fairs
Total	*M*	1.62	.73	.43	.88	.97
	n	107	56	60	120	109
	SD	1.471	1.794	1.577	1.394	1.462

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = no, m^b = yes, m = total

When considering the same data by the method participants used to receive their teaching certificate, teach agriculture ambassadors ($m^a = 0.00$, $m^b = .58$) and career fairs ($m^a = .60$, $m^b = .97$) were of lesser influence on participants who received their teaching certificate through alternative methods. It is to be noted, however, that FFA camp ($m^a = 1.58$, $m^b = 1.64$), Washington Leadership Conference ($m^a = .56$, $m^b = .80$), and college recruitment fairs ($m^a = .93$, $m^b = .99$) are of similar importance level to all participants regardless of certification method. It is also apparent that irrespective of how participants received their teaching credentials, FFA Camp is still the most positively influential factor.

Table 7.08

Means of the Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach by Race/Ethnicity Identification

Race/Ethnicity identification		FFA Camp	Washington Leadership Conference	Teach Agriculture Ambassador	Career Fairs	College Recruitment Fairs
White	*M*	1.63	.85	.51	.91	1.02
	n	101	52	55	112	102
	SD	1.468	1.775	1.574	1.366	1.435
Other	*M*	1.43	-.75	-.40	.38	.29
	n	7	4	5	8	7
	SD	1.512	1.500	1.517	1.768	1.799
Total	*M*	1.62	.73	.43	.88	.97
	n	108	56	60	120	109
	SD	1.464	1.794	1.577	1.394	1.462

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = White, m^b = other, m = total

When considering the recruitment activity influenced by race and ethnicity identification, there are some rather remarkable differences noted. Washington leadership (m^a = .85, m^b = -.75), Teach Agriculture Ambassadors (m^a = .51, m^b = -.41), career fairs (m^a = .91, m^b = .38) and college recruitment fairs (m^a = 1.02, m^b = .29) were considerably more positively influential for white participants than all other participants. Through this, it was observed that the other population viewed Washington Leadership and Teach Agriculture Ambassadors to be a negatively influential experience. At the same time, it is also noted that FFA camp was of similar importance for all populations with the greatest positive influence of *m* = 1.62.

Table 7.09

Means of the Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach by FFA Membership

FFA Member		FFA Camp	Washington Leadership Conference	Teach Agriculture Ambassador	Career Fairs	College Recruitment Fairs
No	*M*				2.00	2.00
	n				2	2
	SD				1.414	1.414
Yes	*M*	1.63	.71	.43	.86	.95
	n	107	55	60	118	106
	SD	1.470	1.802	1.577	1.392	1.470
Total	*M*	1.63	.71	.43	.88	.97
	n	107	55	60	120	108
	SD	1.470	1.802	1.577	1.394	1.469

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = No, m^b = Yes, *m* = Total

FFA members were positively influenced by FFA related recruitment activity, which non-FFA members could not provide a response on. However, the two responses regarding career fairs and college recruitment fairs by non-FFA members indicated that these factors were a positive influence. However, no significant data was observed due to the lack of responses by non-FFA members in this construct.

Construct 4: Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture

Table 8

Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture

	n	*M*	SD
Your high school agriculture teacher	218	2.21	1.299
College Professors	236	1.65	1.361
Other agricultural teachers	232	1.59	1.195
Parents (family members)	242	1.38	1.356
Friends	242	1.12	1.234
Community members	234	1.04	1.292
High School Teacher	226	1.03	1.227

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 8.01

Means of the Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture in Colorado

	n	*M*	SD
Your high school agriculture teacher	48	2.17	1.26
Other agricultural teachers	55	1.56	1.259
Parents (family members)	57	1.42	1.569
College Professors	54	1.19	1.694
Friends	58	1.12	1.171
Community members	56	0.98	1.243
High School Teacher	53	0.75	1.239
Valid n (listwise)	44		

Table 8.01 (continued)

Means of the Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture in Colorado

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 8.02

Means of the Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture in North Carolina

	n	*M*	SD
Your high school agriculture teacher	86	2.31	1.277
College Professors	98	1.85	1.161
Other agricultural teachers	92	1.59	0.985
Parents (family members)	103	1.31	1.237
High School Teacher	95	1.27	1.171
Community members	100	1.24	1.182
Friends	98	1.23	1.138
Valid n (listwise)	80		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 8.03

Means of the Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture in Texas

	n	*M*	SD
Your high school agriculture teacher	76	2.18	1.314
College Professors	76	1.76	1.274
Other agricultural teachers	76	1.66	1.281
Parents (family members)	75	1.45	1.398
Friends	79	0.99	1.354
High School Teacher	70	0.89	1.246
Community members	71	0.83	1.404
Valid n (listwise)	58		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 8.04

Correlations Between Influential Person with State of Employment

	1	2	3	4	5	6	7	8
1. In what state are you currently teaching?	---	-.045	.026	-.145*	-.039	.046	-.087	-.139*
2. Your high school agriculture teacher		---	.199*	.237*	.130	.119	.057	.024
3. Other agricultural teachers			---	.386*	.305*	.303*	.355*	.294*
4. High School Teacher				---	.357*	.330*	.277*	.392*
5. College Professors					---	.300*	.244*	.211*
6. Family members						---	.476*	.401*
7. Friends							---	.493*
8. Community members								---

Table 8.04 (continued)

Correlations Between Influential Person with State of Employment

*. Correlation is significant at the 0.01 level (2-tailed).

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

There is no statistical positive significance connecting state identification and influence to become an agricultural educator from significant people in a person's life. However, it is observed that there is a negative correlation between the state the participants are teaching in and the level of influence community members and high school teachers have on a participant's decision to teach agriculture. However, the conclusion can be drawn that if one is influenced by their community members, it is highly likely they were also influenced to select their career path based on influence from all other influential people, with the exception of their own high school agriculture teacher.

Table 8.05

Means of the Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture by State

In what state are you currently teaching?		Your high school agriculture teacher	Other agricultural teachers	High School Teacher	College Professor	Family member	Friends	Community members
North Carolina	*M*	2.31	1.59	1.27	1.85	1.31	1.23	1.24
	n	86	92	95	98	103	98	100
	SD	1.277	.985	1.171	1.161	1.237	1.138	1.182
Colorado	*M*	2.17	1.56	.75	1.19	1.42	1.12	.98
	n	48	55	53	54	57	58	56
	SD	1.260	1.259	1.239	1.694	1.569	1.171	1.243

Table 8.05 (continued)

Means of the Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture by State

In what state are you currently teaching?		Your high school agriculture teacher	Other agricultural teachers	High School Teacher	College Professor	Family member	Friends	Community members
Texas	*M*	2.18	1.66	.89	1.76	1.45	.99	.83
	n	76	76	70	76	75	79	71
	SD	1.314	1.281	1.246	1.274	1.398	1.354	1.404
Total	*M*	2.23	1.61	1.02	1.66	1.38	1.12	1.05
	n	210	223	218	228	235	235	227
	SD	1.282	1.157	1.227	1.362	1.371	1.222	1.277

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = North Carolina, m^b = Colorado, m^c = Texas

When the influential person construct is broken down by state, no state, in particular, has an overall positive or negative outlook on all categories, nor were there significant differences in level of influence. The only three are community members (, $m^a = 1.24$, $m^b = .98 m^c = .83$), college professors ($m^a = 1.85$, $m^b = 1.19$, $m^c = 1.76$), and high school teachers ($m^a = 1.27$, $m^b = .75$, $m^c = .89$). North Carolina, however, did have a more positive outlook on all three than Texas and Colorado. Texas did have a more positive influence level from college professors and high school teachers than Texas. At the same time, Colorado had a more positive influential outlook on their community members.

Table 8.06

Means of the Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture by Gender Identification

Gender Identification		Your high school agriculture teacher	Other agricultural teachers	High School Teacher	College Professors	Parents (family members)	Friends	Community members
Male	*M*	2.22	1.71	1.04	1.53	1.31	1.06	1.08
	n	97	104	102	105	108	109	106
	SD	1.201	1.040	1.266	1.287	1.330	1.185	1.273
Female	*M*	2.19	1.50	1.00	1.72	1.44	1.16	1.00
	n	115	121	118	125	128	128	123
	SD	1.401	1.252	1.198	1.429	1.396	1.245	1.268
Total	*M*	2.20	1.60	1.02	1.64	1.38	1.11	1.04
	n	212	225	221	231	237	238	230
	SD	1.310	1.162	1.225	1.366	1.365	1.214	1.267

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = females, m^b = males, m = total

Considering the same data by gender, there were no significant differences between males and females. Nor was there a particular population that appeared to be more positive or negative than the other. It was observed that both genders were marginally more positively influenced by their high school agriculture teacher than any other person.

Table 8.07

Means of the Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture by Certificate Obtainment Method

Did you obtain your teaching certificate as a pathway to your bachelor's degree?		Your high school agriculture teacher	Other agricultural teachers	High School Teacher	College Professors	Parents (family members)	Friends	Community members
No	*M*	1.90	1.63	.82	1.23	1.35	1.15	1.14
	n	73	84	85	87	93	91	88
	SD	1.529	1.159	1.274	1.530	1.396	1.043	1.332
Yes	*M*	2.35	1.58	1.14	1.89	1.40	1.07	.99
	n	139	142	135	144	145	145	142
	SD	1.160	1.169	1.192	1.195	1.351	1.316	1.235
Total	*M*	2.20	1.60	1.02	1.64	1.38	1.10	1.05
	n	212	226	220	231	238	236	230
	SD	1.313	1.163	1.231	1.366	1.366	1.216	1.272

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = no, m^b = yes, m = total

When considering the influence people had on agriculture educators, it can be determined that participants who received teacher licensure concurrently with their bachelor's degree rather than through an alternative licensure program were more likely to be positively influenced to select their career based on the influence by their agriculture teacher ($m^a = 1.90$, $m^b = 2.35$), a high school teacher ($m^a = .82$, $m^b = 1.14$) and college professors ($m^a = 1.23$, $m^b = 1.89$).

Table 8.08

Means of the Impact of Influential People on Agricultural Teachers Decision to Teach Agriculture by Race/Ethnicity Identification

Race/Ethnicity identification		Your high school agriculture teacher	Other agricultural teachers	High School Teacher	College Professors	Family members	Friends	Community members
White	*M*	2.21	1.61	1.02	1.64	1.42	1.12	1.08
	n	200	212	209	217	224	224	216
	SD	1.298	1.157	1.240	1.354	1.344	1.218	1.283
Other	*M*	2.07	1.47	1.15	1.80	.73	1.13	.67
	n	14	15	13	15	15	15	15
	SD	1.492	1.246	1.068	1.568	1.534	1.246	1.047
Total	*M*	2.20	1.60	1.03	1.65	1.38	1.12	1.05
	n	214	227	222	232	239	239	231
	SD	1.308	1.161	1.229	1.366	1.363	1.217	1.271

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = White, m^b = other, m = total

There were few notable differences when comparing influential people by race and ethnic identification. The white participants were notably more positively influenced by family members ($m^a = 1.42$, $m^b = .73$) and community members ($m^a = 1.08$, $m^b = .67$) than the rest of the population surveyed. In addition, it was observed that both populations were most positively influenced by their high school agriculture teacher ($m^a = 2.21$, $m^b = 2.07$).

Table 8.09

Means of the Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture by FFA Membership

FFA Member		Your high school agriculture teacher	Other agricultural teachers	High School Teacher	College Professors	Family members	Friends	Community members
No	*M*	-.50	1.91	1.45	2.04	1.37	1.27	1.61
	n	4	22	22	27	35	33	33
	SD	1.000	1.109	.963	1.091	1.114	1.039	1.223
Yes	*M*	2.26	1.58	.99	1.61	1.39	1.11	.96
	n	211	206	201	206	204	206	198
	SD	1.259	1.165	1.253	1.388	1.404	1.249	1.256
Total	*M*	2.21	1.61	1.04	1.66	1.38	1.13	1.06
	n	215	228	223	233	239	239	231
	SD	1.307	1.162	1.233	1.362	1.364	1.221	1.269

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = No, m^b = Yes, m = Total

Overall, both FFA and non-FFA had primarily positive views on the influence of people in their lives, with non-FFA members being more positively influenced by people overall. The exception to this is the low level of influence perceived by non-FFA (m^a = -.50) members regarding their high school agricultural teachers. While non-FFA members were negatively influenced by their high school agricultural teachers, this was the most influential person for FFA members (m^b = 2.26). However, non-FFA members were still positively influenced by other agricultural teachers (m^a = 1.91), even more so than FFA members (m^b = 1.58). Additionally, FFA members (m^b = .99) viewed high school teachers as being less influential when compared to the perception of non-FFA members (m^a = 1.45). Furthermore, college professors were the most influential person for non-FFA members (m^a = 2.04). Finally, non-FFA members (m^a = 1.61) were more positively influenced by community members than what was perceived by FFA members (m^b = .96).

Construct 5: Influential Clubs and Organizations on Agricultural Teachers Decision to Teach Agriculture

Table 9

Influential Clubs and Organizations on Agricultural Teachers' Decision to Teach Agriculture

	n	*M*	SD
CFFA	127	1.36	1.407
Agriculture Educators	111	1.22	1.492
Young Farmers and Ranchers	80	0.72	1.575
Alpha Tau Alpha	73	0.26	1.659
Sigma Alpha	74	0.20	1.613
Alpha Gamma Rho	66	-0.18	1.822
Farmhouse	64	-0.25	1.533
Agriculture Communicators	61	-0.33	1.457
Valid n (listwise)	42		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 9.01

Means of the Impact of Clubs and Organizations on Agricultural Teachers Decision to Teach Agriculture in Colorado

	n	*M*	SD
Agriculture Educators	25	1.40	1.323
CFFA	22	1.27	1.778
Young Farmers and Ranchers	20	1.05	1.791
Alpha Tau Alpha	23	0.96	1.894
Farmhouse	17	0.71	1.724
Alpha Gamma Rho	13	0.31	2.136
Sigma Alpha	17	0.18	1.845
Agriculture Communicators	10	-0.80	1.549
Valid N (listwise)	7		

Table 9.01 (continued)

Means of the Impact of Clubs and Organizations on Agricultural Teachers Decision to Teach Agriculture in Colorado

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 9.02

Means of the Impact of Clubs and Organizations on Agricultural Teachers' Decision to Teach Agriculture in North Carolina

	n	*M*	SD
Agriculture Educators	50	1.14	1.578
CFFA	53	0.98	1.474
Young Farmers and Ranchers	36	0.72	1.649
Sigma Alpha	32	0.44	1.703
Alpha Tau Alpha	31	0.16	1.573
Alpha Gamma Rho	28	-0.36	1.682
Agriculture Communicators	24	-0.42	1.442
Farmhouse	25	-0.68	1.406
Valid n (listwise)	19		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 9.03

Means of the Impact of Clubs and Organizations on Agricultural Teachers Decision to Teach Agriculture in Texas

	n	*M*	SD
CFFA	49	1.84	1.007
Agriculture Educators	33	1.24	1.562
Young Farmers and Ranchers	23	0.43	1.273
Sigma Alpha	25	-0.08	1.32
Alpha Gamma Rho	24	-0.12	1.777
Agriculture Communicators	26	-0.12	1.451
Alpha Tau Alpha	19	-0.42	1.17
Farmhouse	21	-0.57	1.207
Valid n (listwise)	16		

Table 9.03 (continued)

Means of the Impact of Clubs and Organizations on Agricultural Teachers Decision to Teach Agriculture in Texas

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 9.04

Correlations Between Clubs and Organizations

	1	2	3	4	5	6	7	8	9
1. Date Recorded	---	-.113	.117	-.173	-.257*	-.218*	.106	-.043	-.120
2. Sigma Alpha		---	.618*	.616*	.646*	.587*	.599*	.569*	.096
3. Farmhouse			---	.592*	.519*	.436*	.685*	.336*	.006
4. Alpha Gamma Rho				---	.475*	.286*	.512*	.530*	.213
5. Agriculture Communicators					---	.723*	.562*	.676*	.256
6. Agriculture Educators						---	.603*	.720*	.449*
7. Alpha Tau Alpha							---	.578*	.164
8. Young Farmers and Ranchers								---	.537*
9. CFFA									---

*. Correlation is significant at the 0.01 level (2-tailed).

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Through correlation, it was found that all organizations have a significant correlation with each other concerning answers provided by all three states. Collegiate FFA, however, only correlates with the Agriculture Educators club and Young Farmers and Ranchers. Additionally, there is a negative correlation between early and late responders and their influence on the Agriculture Educators club and Agriculture Communicators.

Table 9.05

Means of the Impact of Clubs and Organizations on Agricultural Teachers' Decision to Teach Agriculture by State

In what state are you currently teaching?		Sigma Alpha	Farmhouse	Alpha Gamma Rho	Agriculture Communicators	Agriculture Educators	Alpha Tau Alpha	Young Farmers and Ranchers	CFFA
North Carolina	*M*	.44	-.68	-.36	-.42	1.14	.16	.72	.98
	n	32	25	28	24	50	31	36	53
	SD	1.703	1.406	1.682	1.442	1.578	1.573	1.649	1.474
Colorado	*M*	.18	.71	.31	-.80	1.40	.96	1.05	1.27
	n	17	17	13	10	25	23	20	22
	SD	1.845	1.724	2.136	1.549	1.323	1.894	1.791	1.778
Texas	*M*	-.08	-.57	-.12	-.12	1.24	-.42	.43	1.84
	n	25	21	24	26	33	19	23	49
	SD	1.320	1.207	1.777	1.451	1.562	1.170	1.273	1.007
Total	*M*	.20	-.27	-.14	-.35	1.23	.26	.72	1.37
	n	74	63	65	60	108	73	79	124
	SD	1.613	1.537	1.802	1.459	1.508	1.659	1.585	1.417

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = North Carolina, m^b = Colorado, m^c = Texas

When comparing results for influential clubs and organizations that influenced agricultural educators to pursue their career pathway, the results by state varied immensely. Sigma Alpha was rather low on the rating scale for all states, with Texas (m^c = -.8) being the most negatively influenced and North Carolina (m^a = .44) being the most positively influence. However, the highest influence level only fell at a .44 on the -3 to +3 scale. Farmhouse was deemed a negative impact by both Texas (m^c = -.57) and North Carolina (m^a = -.68), fell within (m = -.11) points of each other, while Colorado rated Farmhouse (m^b = .71). Alpha Gamma Rho was yet another agriculture-related Greek organization that left a negative influence on agricultural teachers, with North Carolina (m^a = -.36) and Texas (m^c = -.12) both leaving a negative level of influence ratings. While Colorado rated AGR at an (m^b = .31), this is still a relatively low rating. Leading researchers to determine that Sigma Alpha, Farmhouse, and Alpha Gamma Rho negatively influence future agricultural teachers. Agricultural Communicators across the board had negative ratings from all states, while Colorado was the most negative. Agriculture Educators club had an overall positive rating from all states, with Colorado having the most favorable level of influence from AEC of (m^b= 1.40) and North Carolina having the lowest level of positive impact at (m^a = 1.14). Alpha Tau Alpha had a negative level of influence from Texas (m^c= -.42). At the same time, Colorado found ATA to be an overall positive experience (m^b = .96). Young Farmers and Ranchers (YF&R) was another example of a positive experience for all three states, but Colorado (m^b = 1.05) teachers rated YF&R as the most positive of the three states. Collegiate FFA (CFFA) was favored highly by all states ranking as the second most preferred by all three states behind AEC. This organization was most favored by Texas (m^c = 1.84) agricultural teachers and least favored by North Carolina teachers while still having a positive rating of (m^a = .98) from North Carolina teachers.

Table 9.06

Means of the Impact of Clubs and Organizations on Agricultural Teachers' Decision to Teach Agriculture by Gender Identification

Gender Identification		Sigma Alpha	Farm house	Alpha Gamma Rho	Agriculture Communicators	Agriculture Educators	Alpha Tau Alpha	Young Farmers and Ranchers	CFFA
Male	*M*	-.11	-.12	.09	-.59	1.06	.56	.74	1.42
	n	28	33	32	27	47	36	39	52
	SD	1.423	1.673	2.115	1.338	1.580	1.557	1.464	1.319
Female	*M*	.40	-.45	-.41	-.12	1.34	-.06	.73	1.34
	n	45	29	32	33	62	35	40	73
	SD	1.724	1.404	1.500	1.556	1.448	1.765	1.710	1.426
Total	*M*	.21	-.27	-.16	-.33	1.22	.25	.73	1.38
	n	73	62	64	60	109	71	79	125
	SD	1.624	1.549	1.836	1.469	1.505	1.679	1.583	1.378

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = females, m^b = males, m = total

When considering the same data by gender identification, males view Sigma Alpha (m^a = .40, m^b = -.11) and Agriculture Communicators (m^a = -.12, m^b = -.59) as more negatively impactful than their female counterparts. It should be noted, however, that Sigma Alpha is a female organization. While females viewed Farmhouse (m^a = -.45, m^b = -.12), Alpha Gamma Rho (m^a = -.41, m^b = .09), and Alpha Tau Alpha (m^a = -.06, m^b = .56) to be more negatively impactful than males. It is to be noted that Alpha Gamma Rho and Farmhouse are male fraternities. While both genders, however, view Agriculture Educators club (m^a = 1.34, m^b = 1.06), Young Farmers and Ranchers ($m^a = .73$, $m^b = .74$), and Colligate FFA ($m^a = 1.34$, $m^b = 1.42$) to be positively influential clubs in regard to their decision to become agricultural educators. Overall, it can be gathered that these clubs are more positively influential for future agricultural educators than the Greek alternatives.

Table 9.07

Means of the Impact of Clubs and Organizations on Agricultural Teachers' Decision to Teach Agriculture by Certification Obtainment Method

Did you obtain your teaching certificate as a pathway to your bachelor's degree?		Sigma Alpha	Farmhouse	Alpha Gamma Rho	Agriculture Communicators	Agriculture Educators	Alpha Tau Alpha	Young Farmers and Ranchers	CFFA
No	*M*	.00	-.55	-.52	-.75	.53	-.25	.30	.94
	n	26	22	27	24	32	24	27	34
	SD	1.855	1.471	1.968	1.539	1.586	1.452	1.636	1.722
Yes	*M*	.31	-.10	.05	-.05	1.49	.51	.94	1.51
	n	48	42	39	37	79	49	53	92
	SD	1.475	1.559	1.701	1.353	1.367	1.709	1.512	1.254
Total	*M*	.20	-.25	-.18	-.33	1.22	.26	.72	1.36
	n	74	64	66	61	111	73	80	126
	SD	1.613	1.533	1.822	1.457	1.492	1.659	1.575	1.411

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = no, m^b = yes, m = total

Agricultural teachers who received their certification through the pursuit of their bachelor's degree overall had a more positive attitude regarding all clubs than their counterparts who received their certification through alternative means. However, this population did view

Agriculture communicators (m^a = -.75, m^b = -.05), Farmhouse (m^a = -.55, m^b = -.10), Alpha Gamma Rho (m^a = -.52, m^b = .05), Sigma Alpha (m^a = .00, m^b = .31), and Alpha Tau Alpha (m^a = -.25, m^b = .51) to be considerably less impactful than Agriculture Educators (m^a = .53, m^b = 1.49), Young Farmers and Ranchers (m^a = .30, m^b = .94), and CFFA (m^a = .94, m^b = 1.51).

Table 9.08

Means of the Impact of Clubs and Organizations on Agricultural Teachers' Decision to Teach Agriculture by Race/Ethnicity Identification

Race/Ethnicity identification		Sigma Alpha	Farmhouse	Alpha Gamma Rho	Agriculture Communicators	Agriculture Educators	Alpha Tau Alpha	Young Farmers and Ranchers	CFFA
White	*M*	.18	-.18	-.12	-.26	1.22	.30	.71	1.34
	n	66	57	59	54	100	66	73	117
	SD	1.607	1.537	1.848	1.456	1.447	1.682	1.514	1.415
Other	*M*	.38	-.86	-.71	-.86	1.18	-.14	.86	1.60
	n	8	7	7	7	11	7	7	10
	SD	1.768	1.464	1.604	1.464	1.940	1.464	2.268	1.350
Total	*M*	.20	-.25	-.18	-.33	1.22	.26	.72	1.36
	n	74	64	66	61	111	73	80	127
	SD	1.613	1.533	1.822	1.457	1.492	1.659	1.575	1.407

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = White, m^b = other, m = total

It was overserved that Farmhouse (m^a = -.18, m^b = -.86), Alpha Gamma Rho (m^a = -.12, m^b = -.71), and Agriculture Communicators (m^a = -.26, m^b = -.86) were viewed as negatively influential for both populations. While it is important that they are all negative, it is more important to note there is a significant difference in the level of negative influence. In comparison, the other population also viewed Alpha Tau Alpha (m^b = -.14) to be a negatively influential experience, while the white population (m^a = .30) viewed it to be a somewhat positively influential experience. In comparison, both populations viewed Agriculture Educators (m^a = 1.22, m^b = 1.18), Young Farmers and Ranchers (m^a = .71, m^b = .86), and CFFA (m^a = 1.34, m^b = 1.60) to be positively influential experiences, with very little difference in influence level.

Table 9.09

Means of the Impact of Clubs and Organizations on Agricultural Teachers' Decision to Teach Agriculture by FFA Membership

FFA Member		Sigma Alpha	Farm house	Alpha Gamma Rho	Agriculture Communicators	Agriculture Educators	Alpha Tau Alpha	Young Farmers and Ranchers	CFFA
No	*M*	-1.14	-1.50	-1.14	-1.00	-.18	-1.00	-.87	-.75
	n	7	6	7	7	11	7	8	8
	SD	1.773	1.643	1.952	2.000	1.991	2.000	1.808	1.982
Yes	*M*	.34	-.12	-.07	-.24	1.37	.38	.90	1.50
	N	67	58	59	54	99	65	72	119
	SD	1.543	1.476	1.789	1.373	1.360	1.588	1.455	1.248
Total	*M*	.20	-.25	-.18	-.33	1.22	.25	.72	1.36
	n	74	64	66	61	110	72	80	127
	SD	1.613	1.533	1.822	1.457	1.499	1.668	1.575	1.407

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = No, m^b = Yes, m = Total

While there were not enough responses from non-FFA members to come to a statistically sound conclusion, it should be noted that across the board, all of the above organizations were viewed as a negative influence by non-FFA members. Furthermore, FFA members only had a slightly positive perception of Sigma Alpha (m^b = .34) and Alpha Tau Alpha (m^b = .38) and a somewhat more positive view of Agriculture Educators (m^b = 1.37) and Colligate FFA's (m^b = 1.50) influence on their decision to become agricultural teachers.

Construct 6: Influential Factors Affecting the Career Decision-Making of Agricultural Teachers

Table 10

Influential Factors Affecting the Career Decision Making of Agricultural Teachers

	n	*M*	SD
I want to contribute to our youth.	260	2.27	0.923
Your high school agriculture teacher	218	2.21	1.299
I want to contribute to society	252	1.96	1.05
Teaching agriculture is a highly skilled occupation.	251	1.70	1.26
Cooperating teacher(s) while student teaching	198	1.62	1.597
Agricultural teachers are valued by their community.	251	1.46	1.383
Student teaching	200	1.16	1.628
Teaching hours will make it easy to have a family.	240	-0.07	1.69
It was a fallback career.	202	-0.30	1.816
Valid n (listwise)	132		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 10.01

The Impact of Factors Affecting the Career Decision Making of Agricultural Teachers in Colorado

	n	*M*	SD
I want to contribute to our youth.	62	2.35	0.77
I want to contribute to society	59	1.92	1.055
Teaching agriculture is a highly skilled occupation.	59	1.47	1.344
Agricultural teachers are valued by their community.	58	1.31	1.453
Cooperating teacher(s) while student teaching	44	1.23	1.854
Student teaching	43	0.93	1.778
Teaching hours will make it easy to have a family.	58	0.14	1.691
It was a fallback career.	46	-0.52	1.735
Valid n (listwise)	32		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 10.02

The Impact of Factors Affecting the Career Decision Making of Agricultural Teachers in North Carolina

	n	*M*	SD
I want to contribute to our youth.	109	2.28	0.756
I want to contribute to society	108	2.01	0.902
Teaching agriculture is a highly skilled occupation.	107	1.75	1.198
Cooperating teacher(s) while student teaching	79	1.66	1.475
Agricultural teachers are valued by their community.	107	1.64	1.284
Student teaching	80	1.00	1.476
Teaching hours will make it easy to have a family.	103	0.13	1.643
It was a fallback career.	85	-0.39	1.807
Valid n (listwise)	58		

Table 10.02 (continued)

The Impact of Factors Affecting the Career Decision Making of Agricultural Teachers in North Carolina

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 10.03

The Impact of Factors Affecting the Career Decision Making of Agricultural Teachers in Texas

	n	*M*	SD
I want to contribute to our youth.	81	2.25	1.067
I want to contribute to society	78	2.00	1.093
Cooperating teacher(s) while student teaching	71	1.82	1.561
Teaching agriculture is a highly skilled occupation.	78	1.81	1.249
Student teaching	72	1.47	1.695
Agricultural teachers are valued by their community.	79	1.30	1.417
It was a fallback career.	66	-0.14	1.896
Teaching hours will make it easy to have a family.	73	-0.51	1.684
Valid n (listwise)	53		

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

Table 10.04

Correlation of Influential Factors

	1	2	3	4	5	6	7	8
1. Teaching hours will make it easy to have a family.	---	.139*	-.005	.054	.146*	.195*	.089	.056
2. I want to contribute to our youth.		---	-.236*	.569*	.259*	.189*	.098	.044
3. It was a fallback career.			---	-.136	-.093	-.097	-.067	-.102
4. I want to contribute to society.				---	.279*	.256*	.133	.058
5. Teaching agriculture is a highly skilled occupation.					---	.518*	.259*	.312*
6. Agricultural teachers are valued by their community						---	.263*	.297*
7. Student teaching							---	.782*
8. Cooperating teacher(s) while student teaching								---

*. Correlation is significant at the 0.01 level (2-tailed).

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Participants who became agricultural teachers to contribute to youth were also significantly influenced by viewing agriculture education as a highly skilled occupations and deemed agricultural teachers to be highly valued members of the community. They also were negatively influenced by the ideology that agriculture education was a fallback career. Allowing researchers to conclude that participants who possessed these values had no intention of using agriculture education as a fallback career; instead, it was their initial goal.

Table 10.05

The Impact of Factors Affecting the Career Decision Making of Agricultural Teachers by State

In what state are you currently teaching?		Teaching hours will make it easy to have a family.	I want to contribute to our youth.	It was a fallback career	I want to contribute to society	Teaching agriculture is a highly skilled occupation.	Agricultural teachers are valued by their community.	Student teaching	Cooperating teacher(s) while student teaching
North Carolina	*M*	.13	2.28	-.39	2.01	1.75	1.64	1.00	1.66
	n	103	109	85	108	107	107	80	79
	SD	1.643	.756	1.807	.902	1.198	1.284	1.476	1.475
Colorado	*M*	.14	2.35	-.52	1.92	1.47	1.31	.93	1.23
	n	58	62	46	59	59	58	43	44
	SD	1.691	.770	1.735	1.055	1.344	1.453	1.778	1.854
Texas	*M*	-.51	2.25	-.14	2.00	1.81	1.30	1.47	1.82
	n	73	81	66	78	78	79	72	71
	SD	1.684	1.067	1.896	1.093	1.249	1.417	1.695	1.561
Total	*M*	-.07	2.29	-.34	1.98	1.70	1.45	1.16	1.62
	n	234	252	197	245	244	244	195	194
	SD	1.687	.869	1.818	1.000	1.252	1.373	1.637	1.606

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = North Carolina, m^b = Colorado, m^c = Texas

When considering influential ideals considered by the agriculture teacher population state by state, the most considerable data difference was that Texas agricultural teachers (m^c = -.51) deem the teaching hours to be negatively impactful on having a family. It was also noted that Texas agricultural teachers were much more positively influenced by student teaching (m^b = .93,

$m^a = 1.00$, $m^c = 1.47$) and cooperating teachers ($m^b = 1.23$, $m^a = 1.66$, $m^c = 1.82$) than Colorado and North Carolina. Colorado ($m^b = 1.47$), however, was much more negatively influenced by the statement that agricultural teachers are highly skilled occupations. North Carolina ($m^a = 1.64$) agricultural teachers were more positively influenced by the statement that agricultural teachers are valued by their community.

Table 10.06

The Impact of Factors Affecting the Career Decision Making of Agricultural Teachers by Gender Identification

Gender Identification		Teaching hours will make it easy to have a family.	I want to contribute to our youth.	It was a fallback career.	I want to contribute to society	Teaching agriculture is a highly skilled occupation.	Agricultural teachers are valued by their community.	Student teaching	Cooperating teacher(s) while student teaching
Male	*M*	-.08	2.31	-.28	1.93	1.79	1.46	1.16	1.69
	n	106	113	94	113	112	112	89	90
	SD	1.614	.780	1.846	1.050	1.209	1.439	1.507	1.548
Female	*M*	-.10	2.26	-.33	2.01	1.58	1.43	1.14	1.53
	n	131	140	103	134	134	134	107	105
	SD	1.745	.932	1.801	.965	1.299	1.340	1.734	1.653
Total	*M*	-.09	2.28	-.30	1.98	1.68	1.45	1.15	1.61
	n	237	253	197	247	246	246	196	195
	SD	1.684	.866	1.818	1.004	1.261	1.383	1.631	1.603

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = females, m^b = males, m = total

When comparing the same data set by gender, there were no significant differences in the impact of males and females.

Table 10.07

The Impact of Factors Affecting the Career Decision Making of Agricultural Teachers by Certificate Obtainment Method

Did you obtain your teaching certificate as a pathway to your bachelor's degree?		Teaching hours will make it easy to have a family.	I want to contribute to our youth.	It was a fallback career.	I want to contribute to society	Teaching agriculture is a highly skilled occupation.	Agricultural teachers are valued by their community.	Student teaching	Cooperating teacher(s) while student teaching
No	*M*	.01	2.25	.29	1.85	1.67	1.23	.56	1.06
	n	91	106	86	100	99	99	55	54
	SD	1.657	.778	1.840	1.086	1.294	1.609	1.549	1.653
Yes	*M*	-.14	2.31	-.80	2.08	1.70	1.60	1.39	1.82
	n	145	147	111	148	147	147	141	141
	SD	1.716	.928	1.672	.937	1.246	1.203	1.616	1.541
Total	*M*	-.08	2.28	-.32	1.99	1.69	1.45	1.16	1.61
	n	236	253	197	248	246	246	196	195
	SD	1.691	.867	1.826	1.004	1.263	1.389	1.636	1.606

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = no, m^b = yes, m = total

Participants who did not receive (m^a = .29) their certification through a bachelor's degree program were more likely to become agricultural teachers as a fallback career option than those who received a license as a degree pathway (m^b = -.8). Moreover, the participants who received their certification through alternative means, were also less likely to be influenced by student teaching (m^a = .56, m^b = 1.39) or cooperating teachers while student teaching (m^a = 1.06, m^b = 1.82). This response was expected, as these participants were possibly not required to participate in student teaching in an agriculture program, and the impact was not expected to be negatively or positively influential. It was also apparent that participants who received their teaching certification with their bachelor's degree were more likely to be positively influenced by the statement that Agricultural teachers are valued by their community (m^a = 1.23, m^b = 1.60).

Table 10.08

The Impact of Factors Affecting the Career Decision Making of Agricultural Teachers by Race/Ethnicity Identification

Race/Ethnicity identification		Teaching hours will make it easy to have a family.	I want to contribute to our youth.	It was a fallback career.	I want to contribute to society	Teaching agriculture is a highly skilled occupation.	Agricultural teachers are valued by their community.	Student teaching	Cooperating teacher(s) while student teaching
White	*M*	-.07	2.26	-.31	1.95	1.65	1.45	1.17	1.63
	n	223	242	189	235	234	233	184	182
	SD	1.672	.876	1.825	1.014	1.269	1.395	1.629	1.592
Other	*M*	-.20	2.57	-.50	2.50	2.29	1.40	1.14	1.53
	n	15	14	10	14	14	15	14	15
	SD	1.935	.646	1.780	.650	.994	1.242	1.748	1.767
Total	*M*	-.08	2.28	-.32	1.98	1.69	1.45	1.17	1.62
	n	238	256	199	249	248	248	198	197
	SD	1.686	.867	1.819	1.004	1.262	1.384	1.633	1.601

Table 10.08 (continued)

The Impact of Factors Affecting the Career Decision Making of Agricultural Teachers by Race/Ethnicity Identification

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = White, m^b = other, m = total

It was observed that both populations found the statements "It was a fallback career" (m^a = -.31, m^b = -.50) and "Teaching hours will make it easier to have a family" (m^a = -.07, m^b = -.20) to be negatively influential reasons to pursue agriculture education as a career. In comparison, both populations found student teaching (m^a = 1.17, m^b = 1.14) and cooperating teachers while student teaching (m^a = 1.63, m^b = 1.53) to be positively influential in their decision to become agriculture educators. Additionally, the other population who participated in the study were more positively influenced by the statements "I want to contribute to our youth" (m^a = 2.26, m^b = 2.57), "I want to contribute to society" (m^a = 1.95, m^b = 2.50), and Agricultural teachers are valued by their community (m^a = 1.65, m^b = 2.29) to be more positively influential in their decision to choose their career pathway, that their white counterparts.

Table 10.09

The Impact of Factors Affecting the Career Decision Making of Agricultural Teachers by FFA Membership

FFA Member		Teaching hours will make it easy to have a family	I want to contribute to our youth	It was a fallback career	I want to contribute to society	Teaching agriculture is a highly skilled occupation	Agricultural teachers are valued by their community	Student teaching	Cooperating teacher while student teaching
No	*M*	.40	2.43	.28	2.17	1.72	1.26	1.05	1.18
	N	35	44	29	41	39	39	20	22
	SD	1.735	.818	1.907	.972	1.337	1.601	1.638	1.651
Yes	*M*	-.15	2.26	-.43	1.95	1.69	1.49	1.18	1.68
	N	203	213	170	208	209	209	178	174
	SD	1.662	.871	1.787	1.008	1.253	1.345	1.637	1.595
Total	*M*	-.07	2.29	-.33	1.98	1.70	1.45	1.17	1.62
	N	238	257	199	249	248	248	198	196
	SD	1.681	.863	1.817	1.004	1.263	1.387	1.633	1.605

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items. Scale: -3 Highly Negative Influence; -2 Negative Influence; -1 = Somewhat Negative Influence; 0 = Neutral; +1 = Somewhat Positive Influence; +2 = Positive Influence; +3 Highly Positive Influence.

m^a = No, m^b = Yes, *m* = Total

Across all of the above factors, non-FFA members indicated no negative perceptions concerning the level of influence these factors had in their decision to become an agriculture teacher. Non-FFA members viewed teaching hours making it easy to have a family as only a slightly positive influence ($m^a = .40$). In contrast, FFA members perceived this factor as narrowly negative ($m^b = -.15$). On the contrary, FFA members perceived a negative influence from the factor of agriculture education being a fallback career (m^b = -.43). In contrast, non-FFA members viewed this factor as only slightly positive(m^a = .28). Meanwhile, they want to contribute to our youth was the most influential factor for both non-FFA (m^a = 2.43) and FFA members (m^b = 2.26) in their decision to become agricultural teachers. Cooperating teachers positively influenced both FFA and non-FFA members (m^a = 1.18) as well. However, FFA members (m^b = 1.68) perceived this factor as more influential than non-FFA members.

Choice or Chance Analysis

Table 11

Choice or Chance Selection by State

	NC		CO		TX		Total	
Choice or Chance Selection	N	%	N	%	N	%	N	%
Choice	74	67.3	41	65.1	55	67.1	170	66.7
Chance	8	7.3	5	7.9	7	8.5	20	7.8
Chance but stay by choice	28	25.5	17	27.0	20	24.4	65	25.5
Total	110	100.0	63	100.0	82	100.0	255	100.0

Note. Tabular data totals may differ from each state's *n* due to non-response to particular items.

m^a = Choice, m^b = Chance, m^c = Chance but stayed by choice

When asked directly if the participants chose to teach or if it was a chance that they became agricultural educators, over 65% of each state Colorado (m^a = 41), North Carolina (m^b = 74), and Texas (m^c = 55) participants became teachers by choice. While in comparison, 20 total participants stated that they became agricultural teachers by chance. However, it is noteworthy that 65 participants agreed with the statement that they became agricultural teachers by chance but stayed by choice.

CHAPTER 5 : CONCLUSIONS, DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

This study aimed to determine the level of influence that various experiences, people, and ideas had on a person's decision to teach agriculture. This study examined three different states to allow researchers to gain a better understanding of the various factors that influence agricultural teachers to teach, as well as understand how unique each state and individual is. While this study aimed to be diverse as possible by including multiple states, it is not claimed that this study is representative of the entire nation because only three states were selected for analysis.

Demographic Data

The target population for this study was agricultural educators in Colorado, North Carolina, and Texas. Of these states, there are 175 agricultural teachers in Colorado, 573 in North Carolina, and 2,379 in Texas. Of this population, researchers have identified a random sample of 121 Colorado Agricultural teachers, 230 North Carolina Agricultural teachers, and 330 Texas Agricultural teachers. From this stratified random sample, 52.1% of participants completed from Colorado, 47.8% from North Carolina, and 24.8% from Texas, for an overall completion rate of 37.4%.

Colorado consisted of 95.2% white or Caucasian and 55.6% female participants. North Carolina participants were 94.5% white or Caucasian and 59.3% female. Texas had 90.4% white or Caucasian and 49.2% female participants. Additionally, the average years of experience for Colorado was 7.56 years, North Carolina was 8.46 years, and Texas reported 11.17 years of experience.

When considering the portion of the sample involved in 4-H and FFA while in high school or middle school, 82.7% of the entire sample surveyed completed at least one year of FFA membership, and 52.5% of the sample completed at least one year of 4-H membership, it was found that 76.2% of Colorado, 84% of North Carolina, and 96.3% of Texas participants completed at least one year of FFA membership. In comparison, 74.6% of Colorado, 39.1% of North Carolina, and 53.0% of Texas participants completed at least one year in 4-H. It is noteworthy that Colorado had the most consistent numbers in organization membership, while Texas had the largest number of teachers who were FFA members, which aligns directly with results found in Duncan et al. (2015), where they reported extension agents/4-H leaders and FFA advisors among the most influential people in students' decisions about college and major selection.

When considering the level of participation in FFA activities for participants, 90.0% of participants who participated in FFA had an SAE, and 90.4% of participants competed in a CDE at any level. Therefore, making these the most substantial activities for future agriculture teachers to participate in. Additionally, 92.3% of participants earned a degree in FFA, whether it was Greenhand, Chapter, State, or American Degree. It should also be noted that of the 210 participants who participated in FFA, 83 earned a State Degree, and 67 earned an American Degree.

From this study, it was found that 58.3% (*n* = 147) of the participants received their agricultural teaching certificate through a traditional pathway, with Texas having the largest population of traditionally certified agricultural teachers. Furthermore, Colorado has the largest percentage of agricultural teachers who did not earn their agricultural teaching certificate in the state in which they teach while also having the largest percentage of agricultural teachers who are not originally from the state in which they teach. This is expected to be due to Colorado only having one Agricultural Education teacher certification program, which is located at Colorado State University in Fort Collins, Colorado. Moreover, Colorado also has the largest percentage of participants who did not pursue agricultural education as their initial degree in college (60.3%, n = 38). However, it should be noted that North Carolina had the largest number of participants who did not initially pursue agricultural education at their primary degree path (54.5%, n = 60). The number of participants from Texas who initially pursue agricultural education (50.0%, n = 41) and graduated with agricultural education as their degree (68.3%, n = 56) is assumed to be incorrect, as a multitude of universities in Texas currently, and/or previously referred to the degree of agricultural education as Interdisciplinary Agriculture.

Objective 1

Objective 1 was developed based on the Agricultural teachers' Creed, which states, “I am an agricultural educator by choice and not by chance,” to determine if agricultural teachers truly become agricultural teachers by choice or by chance. The purpose of this study was to determine why agricultural teachers teach; it was also essential to determine if these teachers have always wanted to be teachers or if they became agricultural teachers due to chance. Chance can be defined as participants becoming agricultural teachers due to an outside force rather than their drive to become agricultural teachers. For instance, the high school administration could have placed a participant in an agricultural education course due to the lack of a teacher or job availability in their area.

During the questionnaire development, an additional category came to light: "I became an agriculture teacher by chance but stayed by choice.” This category is for participants who became teachers by chance but who have continued to remain in teaching because of their passion for students, agriculture, and/or teaching. Participants were directly asked to define how their decision was made through a close-ended question.

Through the question, which asked participants to define the way in which they became agricultural teachers, it was discovered that 66.7% (*n* = 170) of participants became agricultural teachers by choice. While only 7.8% (*n* = 20) of participants stated they became agricultural teachers by chance; however, 25.5% (*n* = 65) of participants believe they became agricultural teachers by chance but stayed by choice.

Recommendations

While most of the participants agreed that they became agricultural teachers by choice. A total of 33.3% (*n* = 85) of participants became agricultural teachers by chance, regardless of their reason for staying, leading researchers to recommend that more research be done to determine what motivates agricultural teachers who choose the career by chance. Specifically, qualitative research would allow agricultural teachers to be more specific in determining the moment or person that influenced them to choose agriculture education as a career. More research to determine why teachers who chose the profession by chance would allow recruitment methods to be better tailored to agricultural teachers. Therefore, assisting in motivating more people to become agricultural teachers who were not altruistic or intrinsically motivated to become agricultural teachers.

Objective Two

Objective 2 aimed to determine the effectiveness of recruitment methods employed by the Teach Ag Campaign, the National FFA Organization, NAAE, and teacher preparation programs and faculty at universities, which was done through the evaluation of two constructs (Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach, Influence of

Recruitment Activities on Agricultural Teachers Decision to Teach) of questions answered by participants. When considering the information from construct two (Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach), two items garnered the most positive influence. These items included clubs and organizations the participant wanted to participate in during their time at university and scholarships. From construct three (Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach), one item was the most important to participants: FFA camp. Clubs and organizations the participant wanted to participate in during their time at university, scholarships, and FFA camp all had a mean rating of M=+1 or above.

While FFA camp was the highest favored item for North Carolina and Texas participants in construct three, it had little influence on Colorado. Therefore, allowing researchers to determine whether FFA Camp is a highly influential factor for agricultural teachers' decision to teach. However, FFA Camp's influence varies greatly depending on the state and should be observed for the states in which FFA Camp holds a higher level of influence to determine how this same effect can be applied to other states. Two items rated an average mean score of M=+.97; these items were “college recruitment fairs” and “proximity to home”. College recruitment fairs are common among colleges of agriculture and should be studied more closely to determine the effectiveness of these opportunities to determine the potential for growth. Proximity to home was another item that varied greatly by the state, which is expected to be due to Colorado's lack of more than one agricultural teacher preparation institution. Regardless of state, proximity to home is something expected to have a somewhat high influence on participants' decision to pursue agriculture education as their primary major at university and cannot be adjusted without the implementation of additional agricultural teacher preparation institutions.

It was observed that two items were of the least importance since they have an average mean rating below .60. These items were recruitment booths at FFA events and Teach Ag Ambassadors. While it was not specified if participants were Teach Ag Ambassadors or if their opinion was based on interactions with Ambassadors, it has been concluded that while Teach Ambassadors may have a positive influence on some people, they overall have a very low level of positive influence on agriculture educators' decision to teach agriculture. Teach Ag Ambassadors' influence is expected to be impacted by the number of years in which they have been active since Teach Ag Ambassadors was not active when all of the participants in this study were in college. Recruitment booths at FFA events having a lower influence score were surprising because recruitment events are a primary method of recruitment employed by agriculturalist organizations such as but not limited to NAAE, Teach Ag Campaign, and Farm Bureau, universities, and potential career opportunities such as but not limited to agriculture journals, tractor tech, and agriculture education.

Recommendations

While items from the second construct (Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach) are of little control by recruiters and agricultural teacher educators, it is recommended that further research be conducted into which clubs and organizations are sought out by potential agricultural teachers. By researching the organizations that future agricultural teachers wish to be involved in, we can continue to be informed about the decisions future agricultural teachers are making and their interests, allowing for the advancement of college environments and for a potential increase in enrollment numbers. The other item of importance to agricultural teachers and their decision-making process for their major and their university was scholarships. Scholarships are an item that universities and faculty have more control over; it is recommended that further research be conducted to determine what scholarships were of influence based on the amount of money offered, when the award was given, and how long the scholarship will continue to pay, because some scholarships may be multi-semester. As well as if the sample had scholarships for multiple institutions and what was the decision-making process among institutions and/or majors. By determining the components of the scholarship, we can be more informed regarding how scholarships should be conducted, and which students should be the focus of scholarships to teach agriculture.

When considering the third construct (Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach), one item demonstrated high positive influence, which was FFA Camp. As stated earlier, FFA Camp’s level of influence varied greatly by state. Whether these camps were at the chapter, district, regional, area, or state level was not recorded. Therefore, qualitative research be conducted regarding which levels of camps are influential in the decision to teach agriculture and which aspects of FFA camps were important for agricultural teachers nationwide, which should then be shared with state leaders of agricultural education for further implementation to encourage positive influential moments in high school students, which increases the likelihood of those students pursuing agricultural education as a career pathway. Teach Ag Ambassadors yielded the least positive influence. It is recommended that NAAE conduct effectiveness studies for both their ambassadors and all interactions their ambassadors are involved in to determine how this opportunity can be improved.

Objective 3

Item A - State

Objective three, item A, sought to evaluate the differences in agriculture teacher decision-making by state (Colorado, North Carolina, and Texas). Overall, the difference between states varied for each construct. However, very few items required more in-depth analysis.

Construct one (Factors Affecting Agriculture Teacher's Decision to Teach Agriculture) revealed little difference in the decision-making process by state, because Colorado was revealed to be more influenced by small class sizes at the university level than North Carolina and Texas, which is expected to be due to the lack of options in In-State universities for agricultural education in the state of Colorado. However, all states were similarly affected by the impact agricultural teachers have on students and the sense of community in the agricultural field than all items in construct one (Factors Affecting Agriculture Teacher's Decision to Teach Agriculture). These findings directly correlate with conclusions from Ingram et al. (2018), specifically with the socializer influence, social value, and passion for agriculture themes. Small class sizes and extended contracts, while still positively influential, held little importance to all teachers regardless of state.

Construct two Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach showed that Colorado was less positively influenced than North Carolina and Texas in every category, with the exception of Scholarship influence (m = 1.12). Scholarships were the most highly influential item for the state of Colorado in this category. Scholarship influence results found in this study are contrary to results demonstrated by Rayfield et al. (2013), where it was found that 50.4% of students did not perceive scholarships as being influential in their decision-making. It can also be determined that college recruitment had little influence on the state of Colorado as a whole. College recruitment was expected to have little influence on Colorado agricultural teachers because Colorado only has one Agriculture Educator certification institution. While having clubs and organizations participants were interested in was most important to North Carolina and Texas agricultural teachers. The two items with the most minor importance to participants were recruitment booths at FFA events and having family who attended that university. These findings directly disagreed with previous research since Kotrlik and Harrison (1987) found that family was a primary influence for students making decisions related to their future careers. However, family attending the university was significantly more important to Texas than the other two states.

Through evaluation of construct three (Recruitment Activities Influence on the Decision to Teach Agriculture), it was found that Colorado was once again the least positive regarding recruitment; in fact, they even had one overall negative response, which was Teach Ag Ambassadors. While North Carolina, on the other hand, was the most positive regarding recruitment events.

Construct four (Impact of Influential People on Agricultural Teachers' Decision to Teach) revealed no particular person of negative or little influence overall. However, Colorado teachers found high school teachers to be the least influential of all items. While Texas teachers deemed, community members are the least compelling. And North Carolina was somewhat similar across the board. Overall, all states found that their high school ag teacher was the most positively influential (m = 2.23). This is in direct conflict with conclusions from Rayfield et al., 2013, who concluded that agricultural teachers are of little influence on their student's decisions to enter agriculture education as a career.

Considering data from construct five (Influential Clubs and Organizations on Agricultural Teachers' Decision to Teach Agriculture) determined that almost all organizations were negatively influential for the state of Texas, with the exception of Agriculture Educators, Young Farmers and Ranchers, and CFFA, which were also the most influential for Colorado and North Carolina as well. In addition, Clubs and organizations were the only constructs where Colorado was the most positive regarding the level of influence. Leading researchers to determine clubs and organizations hold more importance to participants from Colorado than North Carolina and Texas. Therefore, more research should be done regarding the activities utilized by CFFA, Agriculture Educators Club, and Young Farmers and Ranchers at all universities to determine how to improve the effectiveness of these same organizations in other states.

Construct six (Influential Factors Affecting the Career Decision-Making of Agricultural Teachers) sought to determine the influence level of influential factors developed through a literature review. From this data, it was determined that teaching hours making it easy to have a family was a negatively influential factor in Texas; while this item was not of highly positive influence for Colorado and North Carolina, it is still important to note that Texas was significantly less influential for Texas than the other two states. This is believed to be tied to the considerable time restraints of Texas agricultural teachers during the months of January through April because these months are utilized for livestock shows and judging contests. It relates directly to the findings of Hainline et al. (2015), it was reported that Texas agricultural teachers' weekly hours exceed the state average of 50.6 hours per week. Additionally, they spend 36 more hours per week at work than with their family.

Overall, the decision-making process varies greatly by state, which was expected due to the different interactions, requirements, and social values of different regions. Nevertheless, the items which are deemed necessary are consistent across the board. However, the items that are considered of negative influence differ greatly by state and should be further researched to determine methods for improvement in the states that are mostly negative.

Item B - Gender

When evaluating all information from this study through the lens of gender, several trends came to light. Overall, males tend to be less positively influenced than females, with only a few scenarios that do not comply with that statement. The scenarios where males were more positively influenced than females include one item in construct one (Extended contracts), one item in construct two (My family attended that college), one item in construct two (My family attended that college), one item in construct four (Other ag teachers), three items in construct five (Farmhouse, Alpha Gamma Rho, Alpha Tau Alpha), and one item in construct six (I want to contribute to our youth). It was also observed that when females find items to be negative, they also are more negative than their male counterparts. Meaning females are more strongly influenced than males, both negatively and positively.

Construct one (Factors Affecting Agricultural Teachers' Decision to Teach Agriculture) revealed that seeing the impact agricultural teachers have on students was the primary driving factor for both males and females wanting to become agricultural teachers. At the same time, small class sizes at the university level were the least important for both males and females. However, females found job availability to be equally important to class sizes at the university.

Construct two (Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach) and construct three (Recruitment Activities Influence on the Decision to Teach Agriculture) evaluated recruitment activities and events; from this, it was discovered that females and males are highly influenced by universities having the clubs and organizations they are interested in. However, females are also highly influenced by scholarships. In contrast, females are less influenced by a family attending the university than their male counterparts. While in comparison, males are less influenced by recruitment booths at FFA Events than females to choose their university and career. In addition, females and males were both highly positively influenced by FFA Camp. Furthermore, males and females were both equally influenced by Teach Ag Ambassadors while still of positive influence; this was the lowest item in construct three.

From the data collected from construct four (Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture), for both males and females, high school agricultural teachers were the most influential person in their decision to become agricultural teachers. Which aligns with the results found by Park and Rudd (2005), because they found agricultural teachers to be influential in career decision-making. We can assume that the participants who rated their ag teachers as being highly influential were a part of encouraging, comfortable, and inclusive classroom atmospheres while in high school. In comparison, high school teachers were the least influential person in their decision to become agricultural teachers. However, it is to be noted that females rated community members of equal importance to high school teachers. Males also found community members to be of similar importance to females. However, the community members' level of influence rating was of lesser importance than high school teachers for male participants.

Construct five (Influential Clubs and Organizations on Agricultural teachers' Decision to Teach Agriculture) sought to evaluate the level of influence on career decisions that clubs and organizations at the university level had. The overall most influential clubs and organizations for both genders were CFFA and Agriculture Educators Club which had the highest levels of positive influence of all organizations included in this study. Overall, it can be gathered that these clubs are more positively influential for future agricultural educators than the Greek alternatives. In comparison, both genders agreed that Farmhouse, Alpha Gamma Rho, and Agriculture Communicators had a negative influence on their decision to teach agriculture. In addition, both genders agreed that while Sigma Alpha and Alpha Tau Alpha had some positive influence, they were of lesser positive influence on their career decision than CFFA, Agriculture Educators, and Young Farmers and Ranchers. From this, it is also to be noted that males found Sigma Alpha (a female sorority) to be negatively influential, while females found it to be of somewhat positive influence. Females additionally found Farmhouse, Alpha Gamma Rho, and Alpha Tau Alpha to be negatively influential on their decision to teach, while males either found them to be slightly less negative or somewhat positively influential. It is also to be noted that Farmhouse and Alpha Gamma Rho are male fraternities.

The final construct was developed to evaluate how relatable different statements were to participants, where they rated how influential the statements were to their decision to teach agriculture. Overall, both males and females were most strongly influenced by the statement, “I want to contribute to our youth.” They also found the statement “I want to contribute to society” highly influential. In contrast, male and female participants found the statements “Teaching hours will make it easier to have a family” and “Fallback Career” negatively influential regarding their decision-making.

When considering the study in its entirety, the most influential factors for both males and females were their high school Ag teacher, “enjoyed seeing the impact agricultural teachers have on their students”, the sense of community in the agriculture field, and wanting to contribute to youth, as these items were all rated +2 or above. In addition, females also felt very strongly about wanting to contribute to society, as they also rated this item +2.01. From this study, it can be concluded that while males and females align on most criteria regarding their decision-making process, females tend to feel more strongly, whether negative or positive. Overall, the decision-making process is similar for both male and female populations.

Item C – Race/Ethnicity

When considering all information collected and determining if there is a difference in the decision-making process by race and ethnicity, several themes came to light. When considering construct one (Factors Affecting Agricultural Teacher's Decision to Teach Agriculture), the other sample population, which consists of African Americans, Native Americans/Alaskan Natives, and Asians, were more positively influenced by every item than their white counterparts. This was similar to construct two (Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach), with the exception of Recruitment booths at FFA events and Scholarships.

When considering construct three (Recruitment Activities Influence on the Decision to Teach Agriculture), the white population in this sample was more positively influenced by all items than the other population. From this, it is noted that Washington Leadership Conference and Teach Ag Ambassadors were negatively influential for the non-white participants. Construct four (Impact of Influential People on Agricultural Teachers Decision to Teach Agriculture) yielded similar results, as the white participants were more positively influenced by people in their lives than all other racial and ethnic groups, with the exception of two groups of people. Other racial and ethnic groups deemed high school teachers and college professors to be more positively influential than their white counterparts. In addition, both populations viewed community members to be similarly influential.

Construct five (Influential Clubs and Organizations on Agricultural Teachers Decision to Teach Agriculture) revealed that all participants agreed concerning which organizations were positively and negatively influential. The participants found that Agriculture Educators, Young Farmers and Ranchers, and CFFA were most positively influential on their decision to teach. Both populations were also in agreement that Sigma Alpha was a positive influence on their decision; however, neither group was highly influenced by this organization. It is also to be noted that Alpha Tau Alpha was negatively influential on the non-white participant's decision to teach.

The final construct (Influential Factors Affecting the Career Decision-Making of Agricultural Teachers) yielded interesting results, as all items had similar influence levels for all populations. While there were differences between these levels, only two were meaningful enough to warrant further investigation. White participants viewed agriculture education as a highly-skilled job less influential than all other participants. In addition, while the white participants rated wanting to make an impact on society as a positive influence, it was significantly lower than that of all other participants.

There was not enough participation from all racial and ethnic groups to allow for statistically sound data analysis of the influence level of all groups in this study. Therefore, the analysis was conducted based on white and other populations. It is recommended that further research be done in the format of a census study to allow for a more in-depth comparison of racial and ethnic profiles to determine the influence level for the career decision-making of agricultural teachers.

Item D – Traditional or Lateral Entry

Overall, when evaluating data by traditional vs. lateral entry participants, the lateral entry participants were less positive regarding almost every question asked. However, there are a few items where their answers were more positive or less negative than the traditional entry participants.

Construct one (Factors Affecting Agricultural Teachers' Decision to Teach Agriculture) revealed that all items were of lesser importance to lateral entry participants than traditional entry participants. However, it should be noted that participants who obtained their certificate through their bachelor's degree were more positively influenced to become teachers due to the small class sizes at the university level and lateral entry teachers. Construct two (Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach) yielded similar results, with the exception of scholarship. Construct three (Recruitment Activities Influence on the Decision to Teach Agriculture) was another example of lateral entry teachers being less positively influenced than traditional entry teachers. From this, however, it was found that lateral entry teachers are neutral on the subject of Teach Ag Ambassadors, leading to the question of why there is no influence negative or positive. While this may not be the case for all lateral entry teachers, further research should be conducted to determine the effect of Teach Ag ambassadors on lateral entry teachers to determine improvement methods for this program. Therefore making, Teach Ag Ambassadors the only note-worthy difference in decision-making.

Construct four (Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture) determined that people in agricultural teachers' lives are very influential in decision-making. However, the influence a person has varies for participants based on the method by which they obtained their teaching certificate. There were only a few meaningful differences between traditional and lateral entry teachers. All teachers find that their high school ag teachers were the most positively influential person in their decision-making process; however, the conventional teachers were more highly influenced by their high school ag teacher. This was also the case for high school teachers and college professors, since traditional teachers found high school teachers to be slightly more positively influential than lateral entry participants. One interesting note was that community members were more positively influential for lateral entry teachers than traditional entry. Other ag teachers and Family members were of equal importance to both groups. Allowing for the conclusion to be drawn that overall high school ag teachers are the most important for all teachers while other ag teachers and college professors follow closely behind. But when considering lateral entry teachers, high school teachers are the least influential person in their decision to teach. At the same time, traditional entry teachers find community members to be the least influential.

When considering influential clubs and organizations within construct five, almost all clubs and organizations negatively influenced lateral entry teachers, the only clubs they were positively influenced by were Agriculture Educators, Young Farmers and Ranchers, and CFFA. However, it should be noted that CFFA was the only organization close to +1 on the influence scale. There were none to report when considering the differences in decision-making between clubs and organizations of lateral and traditional entry agriculture teachers. The only positive clubs and organizations for lateral entry teachers were also the most positive for traditional entry.

The final construct brought to light several interesting trends in career decision-making. Lateral entry teachers were positively influenced by the statement “Fallback Career.” In contrast, traditional entry teachers were negatively influenced, allowing the researcher to conclude that this difference was due to lateral entry teachers typically using agricultural education as a fallback career. While traditional entry teachers would have more likely had the initial career goal of agriculture education. In addition, student teaching and cooperating teachers while students teaching were of little positive influence on lateral entry teachers' decisions to teach agriculture. However, these two experiences were of relatively great positive influence on traditional teachers. This is expected to be due to the lack of student teaching and cooperative teachers in agriculture education for lateral entry teachers.

Item E – FFA and Non – FFA Members

When considering FFA and Non-FFA members and the difference in decision-making, not all constructs revealed constructive results, as some constructs lacked the participation to draw conclusions. While non-FFA members found a sense of community in the agricultural field and enjoyed seeing the impact ag teachers have on their students to be a positive influence in the decision to teach, community in the agricultural field was less influential for non-FFA members than for FFA members. Leading to the conclusion that there are no actual differences in decision-making for FFA and non-FFA members in construct one (Factors Affecting Agricultural Teacher’s Decision to Teach Agriculture).

In comparison, construct two (Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach) allowed for the conclusion to be drawn that recruitment events for colleges were of lesser influence in agricultural teachers' decision to select their college and major. Recruitment booths at FFA events were expected to be non-influential for non-FFA members. However, they were not expected to view this as a negatively influential experience. Further research is recommended to determine how these experiences may negatively influence non-FFA members and why they were only slightly positive for FFA members. In addition, scholarships were exponentially more influential for FFA members; this is expected to be due to the scholarships given through judging contests, stock shows, and the National FFA Organization, which would not be available to non-FFA members. Moreover, having clubs' participants were interested in was of an exceptionally higher influence level for FFA members; this can be expected to be tied to the connections participants made through FFA. While on the opposite end of the spectrum, proximity to home was of lesser influence on FFA members. Overall making recruitment booths at FFA events is the only actual difference in decision-making.

The results varied immensely when considering influential people in a person's decision to become an agricultural teacher by FFA and non-FFA membership. The four most important takeaways from influential people in a person's life were their high school agricultural teachers, other ag teachers, high school teachers, and community members. Non-FFA members found their high school ag teacher to be a negative influence in their decision to teach, while they also believed other ag teachers were a very positive influence. This response was interesting because it was expected that non-FFA members would not be influenced by their ag teacher. It can be concluded that the participants may have not been in FFA due to a negative experience involving the agriculture teacher. These experiences can range from an exclusive environment to simply not liking the teacher. As Park and Rudd (2005) explain, students are more positively influenced by agricultural teachers when the environment is inclusive and encouraging. While FFA members, on the other hand, were most influenced by their ag teacher. While all items were positive, there were differences in the overall means for the populations, allowing for the conclusion that people are highly influential in agriculture educators' decisions to teach. However, this varies greatly for FFA and non-FFA members. Further research is recommended to determine what made these individuals most and least influential. With additional knowledge of the subject area, agricultural educators can be better trained to assist in informing and influencing students to pursue agriculture education as a career pathway, as they were two of the three most influential people.

Considering clubs and organizations, results were unable to be drawn due to the lack of non-FFA member participation in this round of questions.

When evaluative construct six (Influential Factors Affecting the Career Decision-Making of Agricultural Teachers) by FFA and non-FFA membership, three primary differences in decision-making came to light. FFA members viewed teaching hours as making it easier to have a family as a negative influence, while non-FFA members found this to be slightly positive. This is expected to be due to participants in FFA seeing what the life of an ag teacher may look like, whereas non-FFA members would not have had this opportunity. In addition, the statement fallback career was negatively viewed by FFA participants and positively by non-FFA members. Allowing the conclusion to be drawn that FFA members were less likely to choose agriculture education as a fallback career than their non-FFA counterparts. The entirety of the fallback career aligns with the findings of Gati and Osipow (1996), since they found that lack of information regarding the career and misinformation are the primary reason for the lack of decision-making. Since non-FFA members would have less experience in the agriculture education field than FFA members, they would fall directly into this lack of information and misinformation category, therefore justifying this difference in influence level. Finally, all participants found cooperating teachers while student teaching to be a positive influence; however, non-FFA members were less positively influenced than FFA members, which can be explained by the long hour’s student teaching, which FFA members would have better anticipated. Overall determining that teaching hours make having a family easier is the primary difference between the two populations. Teaching hours of agriculture teachers should be further researched to determine the understanding of teaching hours by FFA and non-FFA members pursuing agriculture teaching degrees. By better understanding the knowledge level of preservice agricultural teachers on the time constraints of the career they are pursuing, teacher educators would be better equipped to prepare future agriculture teachers and assist in reducing teacher burnout for new teachers.

Conclusions

Table 12

Theoretical Framework Alignment by Question and Construct

Question	Ag Ed FIT-Choice® alignment	Factors that Motivate High School Agricultural teachers to Teach	Mean Influence Level
Factors Affecting Agricultural Teacher’s Decision to Teach Agriculture			
Small class sizes at the university level	PTLE	Intrinsic	.73
A large number of available jobs	PUV	Extrinsic	.75
Extended contracts	PUV	Extrinsic	1.02
Sense of community in the field of agriculture	SUV	Intrinsic	2.15
I enjoyed seeing the impact ag teacher have on their students.	SUV	Altruistic	2.43
The Influence of Recruitment Factors on Agricultural Teachers' Decision to Teach			
Recruitment booths at FFA events	PTLE	Extrinsic	.54
My family attended that college		Extrinsic	.63
Proximity to home		Extrinsic	.97
Scholarships		Extrinsic	1.12
Had the program and clubs I wanted to be involved in		Intrinsic	1.52
Influence of Recruitment Activities on Agricultural Teachers' Decision to Teach			
Teach Ag Ambassador	PTLE	Intrinsic	.43
Washington Leadership Conference	PTLE	Intrinsic	.73
Career Fairs	PTLE	Extrinsic	.88

Table 12 (continued)

Theoretical Framework Alignment by Question and Construct

Question	Ag Ed FIT-Choice® alignment	Factors that Motivate High School Agricultural teachers to Teach	Mean Influence Level
College Recruitment Fairs	PTLE	Extrinsic	.97
FFA Camp	PTLE	Extrinsic, Intrinsic, Altruistic	1.62
Impact of Influential People on Agricultural Teachers' Decision to Teach Agriculture			
High School Teacher	PTLE, SP	Extrinsic	1.03
Community members	PTLE, SP	Extrinsic	1.04
Friends	PTLE, SP	Extrinsic	1.12
Parents (family members)	PTLE, SP	Extrinsic	1.38
Other ag teachers	PTLE, SP	Extrinsic	1.59
College Professors	PTLE, SP	Extrinsic	1.65
Your high school ag teacher	PTLE, SP	Extrinsic	2.21
Influential Clubs and Organizations on Agricultural Teachers' Decision to Teach Agriculture			
Agriculture Communicators	PTLE	Extrinsic	-.33
Sigma Alpha	PTLE	Extrinsic	.20
Alpha Gamma Rho	PTLE	Extrinsic	-.18
Farmhouse	PTLE	Extrinsic	-.25
Alpha Tau Alpha	PTLE	Extrinsic	.26
Young Farmers and Ranchers	PTLE	Extrinsic	.75
CFFA	PTLE	Extrinsic	1.36
Agriculture Educators	PTLE	Extrinsic	1.22
Influential Factors Affecting the Career Decision Making of Agricultural Teachers			
Teaching hours will make it easy to have a family.	PUV	Extrinsic	-.07
I want to contribute to our youth.	SUV	Altruistic	2.27
It was a fallback career.	FC	Extrinsic	-.30
I want to contribute to society	SUV	Altruistic	1.96
Teaching agriculture is a highly skilled occupation.	TS	Intrinsic	1.70
Agricultural teachers are valued by their community.	TS	Intrinsic	1.46

Table 12 (continued)

Theoretical Framework Alignment by Question and Construct

Question	Ag Ed FIT-Choice® alignment	Factors that Motivate High School Agricultural teachers to Teach	Mean Influence Level
Student teaching	PTLE, SP	Extrinsic, Intrinsic	1.16
Cooperating teacher(s) while student teaching	PTLE, SP	Extrinsic	1.62

Note. *PTLE=Prior teaching and learning experience, PUV=Personal Utility Value, TR=Task Return SP=Self-Perception, ICV=Intrinsic Career Value, PUV=Personal Utility Value, SUV=Social Utility Value, CTAE=Choice to Teach Agriculture Education.

Overall, from this study, it was concluded that the most influential factors for the entire sample were "I enjoyed seeing the impact ag teacher have on their students," "I want to contribute to youth," the participant's high school ag teacher and the sense of community felt in the agriculture field. In connection with work conducted by Ismail and Miller (2021), all items fell in the intrinsic and altruistic motivator categories. In fact, participants in this study highly regarded all altruistic items. Allowing the researcher to conclude that *Social Utility Value* is the primary driving factor from the Ag Ed FIT-Choice® model (Lawver and Torres, 2011), driving agricultural teachers to choose their career pathway as the participant's mean influence ratings showed all of these items to be positively influential (+2 or higher). It is to also be noted that participants' overall mean influence score for "I want to contribute to society," which is also an altruistic factor, and *Social Utility Value* was m=+1.96; while not rating above a +2, this item fell close enough that it was important to mention.

In conjunction, extrinsic factors negatively influenced participants' decision to teach agriculture. Dickenson (1989) found that intrinsic motivators are built based on extrinsic motivators. However, this study concluded that intrinsic motivators were of high importance to participants, whereas extrinsic motivates were typical of low or negative influence. This difference can be explained by Rayfield et al. (2013), for they explain that motivators change with generations. Research must be done regularly to understand future agricultural teachers' career motivators continuously.

Recommendations

While this study confirmed several themes which agreed with previous literature, such as the lack of difference in decision-making between genders (Y. Barry Chung, 2002). In comparison with Ingram et al. (2018), further qualitative research should be conducted to determine specific decision points for agriculture educators since this study also determined there is a large portion of agriculture teachers became teachers by chance, which needs to be further evaluated as a primary research objective. Additionally, this study brought to light several gaps in the literature; reasons for these can only be assumed since this study needed to dive into the details of agriculture teacher career decision-making. This study found altruistic and intrinsic motivators to be the primary motivator of this sample of agriculture teachers which disagrees with the findings of Ismail and Miller, 2017, Marx et al., 2014; Kotrlik & Harrison, 1987; Ismail and Miller, 2021, and Lawver and Torres, 2012. It is recommended further research be conducted on a larger scale to determine the influential categories influencing agricultural teachers to teach, such as altruistic, intrinsic, and extrinsic categories. By determining the primary motivational categories, researchers would be better equipped to develop questionnaires based on the categorical motivators.

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APPENDICES

APPENDIX A

Tier 3: Factors influencing educators' decision to teach.

By electronically signing this consent form, I am affirming that I have read and understand the consent form provided to me by email. All of the questions that I had about this research have been answered. I have chosen to participate in this study with the understanding that I may stop participating at any time without penalty or loss of benefits to which I am otherwise entitled. I am aware that I may revoke my consent at any time.

× SIGN HERE

clear

Rate the following on how influential this person was on your decision to teach agriculture?

	Highly Negative	Negative	Somewhat Negative	Neutral	Somewhat Positive	Positive	Highly Positive	Not Applicable
	-3	-2	-1	0	1	2	3	
Your high school ag teacher								☐
Other ag teachers								☐
High School Teacher								☐
College Professors								☐
Parents (family members)								☐
Friends								☐
Community members								☐

Rate the following statements on how influential these factors were on your decision to teach agriculture?

	Highly Negative -3	Negative -2	Somewhat Negative -1	Neutral 0	Somewhat Positive 1	Positive 2	Highly Positive 3	Not Applicable
A large number of available jobs								☐
Extended contracts								☐
Small class sizes at the university level								☐
I enjoyed seeing the impact ag teacher have on their students.								☐
Sense of community in the field of agriculture								☐

Did speaking in front of your peers (i.e. class presentations) encourage you to teach in high school or college?

- ○ No
- ○ Yes

How impactful was this experience on your decision to teach agriculture?

	Highly Negative	Negative	Somewhat Negative	Neutral	Somewhat Positive	Positive	Highly Positive
	-3	-2	-1	-0	0	1	2	3
Speaking in front of my peers							

Did you ever consider becoming a teacher to give your students someone of their gender or race to look up to?

- ○ No
- ○ Yes

Did you receive a scholarship specific to Agriculture Education?

- ○ No
- ○ Yes

How influential was the scholarship in your decision to teach?

	Highly Negative	Negative	Somewhat Negative	Neutral	Somewhat Positive	Positive	Highly Positive
	-3	-2	-1	-0	0	1	2	3
Receiving an Ag Edu scholarship							

Rate the level of influence the following factors had on your desire to become an agriculture teacher.

	Highly Negative	Negative	Somewhat Negative	Neutral	Somewhat Positive	Positive	Highly Positive	Not Applicable
	-3	-2	-1	-0	0	1	2	3
Teaching hours will make it easy to have a family.								☐
I want to contribute to our youth.								☐
It was a fallback career.								☐
I want to make a contribution to society								☐
Teaching agriculture is a highly skilled occupation.								☐
Agriculture Teachers are valued by their community.								☐
Student teaching								☐
Cooperating teacher(s) while								☐

student teaching

Did you ever tutor a peer while in high school or college?

- No
- Yes

How influential was this experience on your decision to teach?

	Highly Negative	Negative	Somewhat Negative	Neutral	Somewhat Positive	Positive	Highly Positive
	-3 -2		-1 -0		0 1		2 3
Tutoring							

Please select a statement below that best describes your decision to become an agriculture teacher.

- 1. My decision to teach was my choice
- 2. My decision to teach was by chance
- 3. My decision to teach was by chance, but it was my choice to keep teaching

Please describe the point in time when you decided to teach agriculture in the space below.

Tier 2: Agricultural Background

How many years did you participate in the following organization?

	Years						
	0	1	2	3	4	5	6
FFA	O	O	O	O	O	O	O

How many years did you participate in the following organization?

	Years										
	0	1	2	3	4	5	6	7	8	9	10
4-H	○	○	○	○	○	○	○	○	○	○	○

How many semesters did you complete an agriculture-related course in high school/middle school?

	Semesters								
	0	1	2	3	4	5	6	7	8
High School	○	○	○	○	○	○	○	○	○
Middle School	○	○	○	○	○	○	○	○	○

When applying to college, was agriculture education your initial degree path?

○ No
○ Yes

What was your initial major in college?

When you graduated college, was your major agriculture education?

○ No
○ Yes

What was your major when graduating college?

Did you change majors during your bachelor's degree to agriculture education?

- No
- Yes

Rate how impactful the following recruitment factors were to your decision to select your college

	Highly Negative -3	Negative -2	Somewhat Negative -1	Neutral 0	Somewhat Positive 1	Positive 2	Highly Positive 3	Not Applicable
Recruitment booths at FFA events								☐
My family attended that college								☐
Scholarships								☐
Proximity to home								☐
Had the program and clubs I wanted to be involved in								☐

While in college, did you participate in any clubs or organizations?

- No
- Yes

Rate the level of influence these clubs and organizations had on your decision to teach.

	Highly Negative -3	Negative -2	Somewhat Negative -1	Neutral 0	Somewhat Positive 1	Positive 2	Highly Negative 3	Not Applicable
Sigma Alpha								☐
FarmHouse								☐
Alpha Gamma Rho								☐
Agriculture Communicators								☐

Agriculture Educators	☐
Alpha Tau Alpha	☐
Young Farmers and Ranchers	☐
Collegiate FFA	☐

Were you in contact with university staff before you attended college?

- ○ No
- ○ Yes

How influential they were on your decision to attend college

	Highly Negative	Negative	Somewhat Negative	Neutral	Somewhat Positive	Positive	Highly Positive
	-3	-2	-1	0	1	2	3
University Staff							

Did you ever attend any events put on by the university you graduated from while you were in high school?

- ○ No
- ○ Yes

How influential the events were on your decision to attend college

	Highly Negative	Negative	Somewhat Negative	Neutral	Somewhat Positive	Positive	Highly Positive
	-3	-2	-1	0	1	2	3
College recruitment events							

Did you consider agriculture education as a career because it combines a field you were interested in, such as animal science or plant science, and interacting with youth?

- No
- Yes

Does the agricultural community in your area provide you with a sense of community?

- No
- Yes

Did the agricultural community in your area provide you with a sense of community **while you were growing up**?

- No
- Yes

In high school, did you participate in recruitment activities for college or FFA?

- No
- Yes

Rate the level of influence these events had on your decision to teach.

	Highly Negative -3	Negative -2	Somewhat Negative -1	Neutral 0	Somewhat Positive 1	Positive 2	Highly Positive 3	Not Applicable
Tagged to Teach Ag								☐
FFA Camp								☐
Washington Leadership Conference								☐
Teach Ag Ambassador								☐
Career Fairs								☐
College Recruitment Fairs								☐

Are any members of your family agriculture teachers?

- ○ a. Spouse
- ○ b. Sibling
- ○ c. Parents
- ○ d. Aunts, uncles, cousins
- ○ e. Grandparents
- ○ No

How influential were the following FFA activities on your decision to teach?

	Highly Negative -3	Negative -2	Somewhat Negative -1	Neutral 0	Somewhat Positive 1	Positive 2	Highly Positive 3	Not Applicable
State and national conventions								☐
Camps								☐
CDEs (livestock eval, ag mech, etc.)								☐
LDEs (speaking, Creed, etc.)								☐
Community service								☐
SAE								☐
Proficiencies								☐
Degrees								☐
Offices and leadership positions								☐

Did you have an SAE?

- ○ No
- ○ Yes

What was the highest level CDE you competed in?

- None
- District
- Area
- Region
- State
- National

What was the highest level LDE you competed in?

- None
- District
- Area
- Region
- State
- National

What was the highest level Agriscience Fair you competed in?

- None
- District
- Area
- Region
- State
- National

What was the highest level of FFA office you held?

- None
- District
- Area
- Region
- State
- National

What is the highest FFA degree you have earned?

- Have not received a degree
- Discovery
- Greenhand
- Chapter
- State
- American

What is the highest level of proficiency recognition you received?

- None
- Chapter
- State
- National

What is the highest level of Star degree recognition you received?

- None
- Chapter
- State
- National

Tier 1: Personal Background

What gender do you identify with?

- Male
- Female
- Non-binary / third gender
- Prefer not to say

What race/ethnicity do you identify as?

- White
- Black or African American
- American Indian or Alaska Native

- Asian
- Native Hawaiian or Pacific Islander
- Other

What is the highest level of education you have completed

- Bachelor's Degree
- Master's Degree
- Doctoral Degree

Are any members of your family teachers? (Select all that apply)

- Spouse
- Sibling
- Parent
- Aunts, Uncles, or Cousins
- Grandparent
- Other

What type of school environment do you classify your current high school?

- Rural
- Urban
- Suburban

What type of school environment would you classify your high school you graduated from?

- Rural
- Urban
- Suburban

In what state are you currently teaching?

Did you obtain your original teaching certificate from the state in which you are currently teaching?

- No
- Yes

Did you grow up in the state in which you are currently teaching?

- No
- Yes

How many years have you been teaching agriculture?

Have you taught subjects other than agriculture?

- No
- Yes

How many teachers are currently teaching in your Agriculture Program?

- 1
- 2
- 3
- 4
- 5 or more

Did you obtain your teaching certificate as a pathway to your bachelor's degree?

- No
- Yes

Did you partake in an alternative licensure method to obtain your teaching certificate outside of an education-based bachelor's degree?

- No
- Yes

What is your First and Last name?
We are asking your name to ensure we do not contact you multiple times after you complete the study. All identifying information will be deleted before the data is analyzed.

What school are you currently teaching at?

What is your email address which was used to initially contact you?

APPENDIX B

NC STATE UNIVERSITY

Informed Consent for Participation in Research

Consent Form

Title of Study: How Agricultural Educators are Drawn to Their Career Path: An Examination of Agricultural Educators in Three States **(eIRB # 25559)**
Principal Investigator(s): Rachelle Andreatta, rrandrea@ncsu.edu, and (719) 989-0712
Funding Source: None
NC State Faculty Point of Contact: Dr. Travis Park, tdpark@ncsu.edu, (919) 515-9441

What are some general things you should know about research studies?
You are invited to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate, and to stop participating at any time without penalty. The purpose of this research study is to gain a better understanding of why agriculture educators choose their career path. We will do this through a series of questions in a qualtrics survey.

You are not guaranteed any personal benefits from being in this study. Research studies also may pose risks to those who participate. You may want to participate in this research because the results of this study will help us to identify common trends among agriculture teachers and close the gap of teachers needed. You may not want to participate in this research because the survey asks questions regarding your background and how you got involved in agriculture education.

Specific details about the research in which you are invited to participate are contained below. If you do not understand something in this form, please ask the researcher for clarification or more information. A copy of this consent form will be provided to you in an email available for download in the second email where the survey will also be available. If, at any time, you have questions about your participation in this research, do not hesitate to contact the researcher(s) named above or the NC State IRB office. The IRB office's contact information is listed in the *What if you have questions about your rights as a research participant?* section of this form.

What is the purpose of this study?
The purpose of the study is to provide insights into the career choices of agriculture teachers, researchers will make an attempt to determine the linkage between how and why agriscience teachers choose their career paths.

How many people will be in the study?
There will be approximately 334 Texas Ag teachers, 229 North Carolina Ag teachers, and 106 Colorado Ag teacher participants in this study.

Am I eligible to be a participant in this study?
In order to be a participant in this study, you must agree to be in the study, be at least 18 years old, and be an agriculture teacher in either the state of Texas, North Carolina or Colorado.

You cannot participate in this study if you do not meet the inclusion criteria or are not an agriculture teacher in Texas, North Carolina, or Colorado.

NC STATE UNIVERSITY

What will happen if you take part in the study?
If you agree to participate in this study, you will be asked to do all of the following:

1. Take an online survey through qualtrics that will take approximately 13 to 20 minutes to complete.

The total amount of time that you will be participating in this study is 13 to 20 minutes.

Risks and benefits
There are minimal risks associated with participation in this research.

There are no direct benefits to your participation in the research. The indirect benefits are the potential recruitment tools for agriculture education that may arise out of this study to help close the gap of agriculture teachers needed nationwide.

Right to withdraw your participation
You can stop participating in this study at any time for any reason. To do so, just stop any research activity that you are doing or contact the student researcher, Rachelle Andreatta, at rrandrea@ncsu.edu and (719) 989-0712. You can also contact the faculty advisor for this research, Dr. Travis Park, at tdpark@ncsu.edu and (919) 515-9441.If you choose to withdraw your consent and to stop participating in this research, you can expect that the researcher(s) will redact your data from their data set, securely destroy your data, and prevent future uses of your data for research purposes wherever possible. This is possible in some, but not all, cases.

Confidentiality, personal privacy, and data management
Trust is the foundation of the participant/researcher relationship. Much of that principle of trust is tied to keeping your information private and in the manner that we have described to you in this form. The information that you share with us will be held in confidence to the fullest extent allowed by law.

Protecting your privacy as related to this research is of utmost importance to us. There are very rare circumstances related to confidentiality where we may have to share information about you. Your information collected in this research study could be reviewed by representatives of the University, research sponsors, or government agencies (for example, the FDA) for purposes such as quality control or safety. In other cases, we must report instances in which imminent harm could come to you or others.

How we manage, protect, and share your data are the principal ways that we protect your personal privacy. Data that will be shared with others about you will be de-identified.

> **De-identified**. De-identified data is information that at one time can directly identify you, but that we will record this data so that your identity will be separated from the data. We will have a master list with your code and real name that we can use to link to your data. This is to ensure you will not be contacted again once you complete the survey. When the research concludes, there will be no way your real identity will be linked to the data we publish.

NC STATE UNIVERSITY

Future use of your research data
Your information, even with identifiers removed, will not be stored or distributed for future research studies.

Compensation
There is no compensation for participating in this study.

What if you have questions about this study?
If you have questions at any time about the study itself or the procedures implemented in this study, you may contact the student researcher, Rachelle Andreatta, at rrandrea@ncsu.edu and (719) 989-0712. You can also contact the faculty advisor for this research, Travis Park, at tdpark@ncsu.edu and (919) 515-9441.

What if you have questions about your rights as a research participant?
If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact the NC State IRB (Institutional Review Board) office. An IRB office helps participants if they have any issues regarding research activities. You can contact the NC State University IRB office at IRB-Director@ncsu.edu, 919-515-8754, or fill out a confidential form online at https://research.ncsu.edu/administration/participant-concern-and-complaint-form/

Consent to participate
By electronically signing this consent form in the qualtrics survey, I am affirming that I have read and understand the above information. All of the questions that I had about this research have been answered. I have chosen to participate in this study with the understanding that I may stop participating at any time without penalty or loss of benefits to which I am otherwise entitled. I am aware that I may revoke my consent at any time.

If you consent to complete this survey, please click the link below to access the survey, then sign your name on the first page to confirm that you have read and understand this consent form and agree to willingly participate.

Thank you for your consideration.

APPENDIX C

Hello,

My name is Rachelle Andreatta; I am a graduate assistant at North Carolina State University. Before NC State, I received my bachelor's degree in Agriculture Education at Texas Tech University. Prior to that I attended La Veta High School in Colorado and was an FFA Member there for five years serving as the 2019 State FFA Nominating Committee Chairman.

I want to invite you to participate in my Decision to Teach Agriculture survey, to help me complete my thesis, and more importantly address the shortage of agriculture teachers nationwide. This survey should take no longer than 15 minutes.Why do you teach agriculture survey link

For my thesis research, I am studying why ag teachers choose their careers in hopes we can encourage more college and high school students to pursue degrees in Agriculture Education and close the gap in the need for agriculture teachers. We are seeking your assistance and input to help us find answers.

We will be sure to delete all identifying information prior to analyzing the results of the survey. All results will be analyzed in the aggregate, so no identifying information will be available to the public.

Below you will find the informed consent form, which is available for you to read and download prior to participating in the survey. This form includes all details pertinent to the study, which has been read and approved by my University supervisor.

Consent form.docx

Thank you for your time and input. If you have any questions regarding this study, please reach out to me at rrandrea@ncsu.edu or (719) 989-0712.

Kindly,

Rachelle Andreatta
Graduate Assistant
Agriculture and Extension Education
North Carolina State University
(719) 989-0712 | rrandrea@ncsu.edu

NC STATE UNIVERSITY

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APPENDIX D

Hello,

My name is Rachelle Andreatta; I am a master's student at North Carolina State University. Before NC State, I received my bachelor's degree in Agriculture Education at Texas Tech University. And before that attended La Veta High School in Colorado and was an FFA Member there for five years.

I am reaching out again to invite you to participate in my Decision to Teach Agriculture survey. There is currently very little research about why agriculture teachers choose their careers. Through this research, I hope to gain insight into why agriculture teachers decide to teach to help improve agriculture education recruitment methods to assist in closing the gap of agriculture teachers needed nationwide.
You can take the survey by clicking the link below this paragraph; the survey should take at most 15 minutes.

Why do you teach agriculture survey link

We will be sure to delete all identifying information before analyzing the survey results. All results will be analyzed in the aggregate, so no identifying information will be available to the public.

Below you will find the informed consent form, which is available for you to read and download before participating in the survey. This form includes all details pertinent to the study, which my University supervisor has read and approved.

Consent form.docx

Thank you for your time and input. If you have any questions regarding this study, please reach out to me at rrandrea@ncsu.edu or (719) 989-0712.

Kindly,

Rachelle Andreatta
Graduate Assistant
Agriculture and Extension Education
North Carolina State University
(719) 989-0712 | rrandrea@ncsu.edu

NC STATE UNIVERSITY

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APPENDIX E

Hello,

I am reaching out again to stress the importance of your participation in this survey. This survey is the basis of my thesis study, which is required for my graduation in May.

You have been randomly selected for this study to represent agriculture teachers in North Carolina to give us a better idea of how to recruit future ag teachers in North Carolina to help close the gap in the need for agriculture teachers and ensure our young people continue to stay informed on the agricultural world. Therefore, I am asking you to please take 15 minutes to complete this survey and ensure your state is well-represented.

You can take the survey by clicking the link below; the survey should take at most 15 minutes.

Why do you teach agriculture survey link

We will delete all identifying information before analyzing the survey results. All results will be analyzed in the aggregate, so no identifying information will be available to the public.

Below you will find the informed consent form, which is available for you to read and download before participating in the survey. This form includes all details pertinent to the study, which my University supervisor has read and approved.

Consent form.docx

Thank you for your time and input. If you have any questions regarding this study, please reach out to me at rrandrea@ncsu.edu or (719) 989-0712.

Kindly,

Rachelle Andreatta
Graduate Assistant
Agriculture and Extension Education
North Carolina State University
(719) 989-0712 | rrandrea@ncsu.edu

NC STATE UNIVERSITY

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APPENDIX F

Hi again,

I was hoping you would be willing to take 15 minutes to participate in my survey, as this study is part of my graduation requirement for my Master's degree.

Agriculture education is something I have been passionate about since I was just a child in 4-H. Now I am a young adult trying to learn why others teach agriculture to help make the field better for our future students. As well as recruit more people to pursue the best career on this earth. I greatly appreciate your time and willingness to assist me in completing my studies and trying to learn Why Ag Teachers Teach!

You can take the survey by clicking the link below; the survey should take at most 15 minutes.

Why do you teach agriculture survey link

We will delete all identifying information before analyzing the survey results. All results will be analyzed in the aggregate, so no identifying information will be available to the public.

Below you will find the informed consent form, which is available for you to read and download before participating in the survey. This form includes all details pertinent to the study, which my University supervisor has read and approved.

Consent form.docx

Thank you for your time and input. If you have any questions regarding this study, please reach out to me at rrandrea@ncsu.edu or (719) 989-0712.

Kindly,

Rachelle Andreatta
Graduate Assistant
Agriculture and Extension Education
North Carolina State University
(719) 989-0712 | rrandrea@ncsu.edu

NC STATE UNIVERSITY

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APPENDIX G

Hi again,

I know that the life of an ag teacher is not an easy one, and right now is a very busy time for you. I am currently just below the threshold for creating a quality research study, and I was hoping you would take 15 minutes to complete my survey.
Your support in this survey is very important to ensure the population of agricultural educators is equally represented. Your help will ensure any further work done to improve the recruiting of agriculture teachers is of the best quality possible.

You can take the survey by clicking the link below; the survey should take at most 15 minutes.

Why do you teach agriculture survey link

We will delete all identifying information before analyzing the survey results. All results will be analyzed in the aggregate, so no identifying information will be available to the public.

Below you will find the informed consent form, which is available for you to read and download before participating in the survey. This form includes all details pertinent to the study, which my University supervisor has read and approved.

Consent form.docx

Thank you for your time and input. If you have any questions regarding this study, please reach out to me at rrandrea@ncsu.edu or (719) 989-0712.

Kindly,

Rachelle Andreatta
Graduate Assistant
Agriculture and Extension Education
North Carolina State University
(719) 989-0712 | rrandrea@ncsu.edu
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