2024

Factors that Influence Males to Teach Agricultural Education

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FACTORS THAT INFLUENCE MALES TO TEACH AGRICULTURAL EDUCATION

by

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A DISSERTATION

Presented to the Faculty of

The College of Education and Human Services

Department of Educational Studies, Leadership, and Counseling

at Murray State University

In Partial Fulfillment of Requirements

For the Degree of Doctor of Education

P-20 & Community Leadership

Specialization: Agricultural Education

Under the supervision of Professor Dr. Alyx Shultz

Murray, KY

May 2024

To my family for their constant love and support in all of my endeavors in life

Acknowledgements

My mother always said, “It takes a village to raise a family”, and the older I get in life the more I understand this statement. Throughout my life and teaching career I have had a lot of people who have been part of my village in helping me to achieve my goals. Over the last few years in working toward achieving my goal of advancing my education, my village has been there to support me and provide me with the constant support and encouragement to keep working through the late nights and long weekends.

To my parents, parents in love, and grandparents, thank you for your constant support throughout my educational journey and teaching career. I am forever grateful to all of you for your continued encouragement and support. Thank you for being there to watch Reiher the days I spent doing homework, reading, and writing to advance my education.

To my colleagues and students at Tift County High School, thank you for being there to support me on this journey. My students continue to be a driving force in wanting to improve my teaching and leadership skills within the classroom. Thank you to my co-workers who helped to pick up activities and support me in balancing working and earning an advanced degree.

To the faculty and staff at Murray State University, thank you for providing me with guidance and instruction as I deepened my knowledge in P-20 and community leadership. Thank you to Dr. Randal Wilson for being my advisor and helping me navigate my coursework. Thank you to my committee member Dr. Kirby Barrick who has supported me in my education from the beginning as an undergraduate student at the University of Florida. Finally, thank you to my committee chair Dr. Alyx Shultz for helping me think through my data collection, proofread chapters, and navigate the dissertation process. I will be forever grateful to you all.

To my sweet precious baby boy Reiher. You have been with me through this dissertation journey. I hope that through our example you will see that you are capable of anything your heart desires.

Last, but certainly not least (and certainly the most important), thank you to my husband Andrew. Your constant love, support, and guidance has helped me to push myself in this educational journey. I am fortunate that we both have a passion for working with students and in the field of agricultural education. Your thoughts and observations have helped me to see my teaching and learning experiences from a different perspective. I am forever grateful for your support through this process. Whether that was an ear to listen, someone to bounce ideas off, or all of the times you have helped to take care of our baby boy and pick up chores at home so that I could work on my studies. I love you.

Abstract

The need for more males entering the teaching profession is linked to the idea of the gender gap in school with females outperforming males, and the need for young men to have strong role models. Therefore, the purpose of this study is to determine factors that influence males to teach agricultural education. This study utilized an adapted version of the Ag-Ed FIT Choice Instrument to collect data through a modified version of Dillman's Tailored Design Method, with three contacts of a pre-notice letter, emailed instrument, and a thank you/reminder. The population consisted of male agricultural education students enrolled in teacher preparation programs identified through a convenience sample of eight institutions in the Southeastern United States. Descriptive statistics were utilized to analyze research question one and two and research questions three and four were addressed utilizing correlations. Participants in this study tended to be Caucasian, juniors in college, grew up in a household structure that contained a mother and a father figure, enrolled in school based agricultural education programs, members of the National FFA Organization (FFA), most active in career development events, and had supervised agricultural experience. Participants tended to indicate they looked to their agriculture teacher/FFA advisor for mentorship and agriculture teachers were the most influential people in the participants decision to teach secondary school agricultural education. Recommendations were made for teacher educators, secondary school agriculture teachers, and future research focused on recruitment efforts of males enrolled in secondary school agriculture programs.

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CTE Career and Technical Education

FFA National FFA Organization

SAE Supervised Agricultural Experience

FIT Factors Influencing Teaching

CHAPTER I:

INTRODUCTION

Context

School-based agricultural education has aimed to educate students in and about agriculture for over 100 years. Agriculture programs are found in secondary schools, most commonly, at the middle and high school grade levels (6-12). The focus of agriculture programs over the years has shifted from vocational (primarily career preparation) to career and technical education with a focus on career exploration, incorporation of academics such as math and science, and agricultural literacy. To prepare the future career field of agriculture, school-based agricultural education programs prepare students through three components of instruction, also referred to as the three-circle model, including classroom/laboratory instruction, supervised agricultural experience (SAE), and the National FFA Organization (FFA) (Phipps et. al, 2008; Croom, 2008).

Historically, the teaching field was dominated by male teachers both in academics and vocational fields such as agricultural education (Johnson, 2008; Foster et. al, 2021). As early as the colonial period into the 19th century education was viewed as a stable and respectable job for middle class males. However, as the country transitioned into the industrial age, jobs within the industrial field were more attractive to males as they offered higher wages. With this mass exodus of individuals leaving the profession, educational reformists began marketing teaching as "women's work" (Johnson, 2008). Thus, the fall of males entering the teaching profession began. Today, of the 3.8 million teachers in the education field, 23% of them are male (National Center for Education Statistics, 2023). Mirroring the teaching field, the field of agricultural education has traditionally been led by male teachers. While the most recent data shows that males make

up 57% of the agriculture education profession, the number of males entering college to major in agricultural education is only 25% (Lawver et al., 2018; National Association of Agricultural Educators, 2020).

Purpose of the Study

The purpose of this study is to determine factors that influence males to teach agricultural education. This study focused on males who have chosen to enroll in agricultural education programs at the post-secondary level. Research questions focused on determining the demographics of males choosing to major in agricultural education, factors that influence males to pursue a degree in agricultural education, and the relationships between attitudes toward becoming an agriculture teacher, beliefs about teaching, decisions to become a teacher, and influencers on the decision to teach of males pursuing an agriculture education degree.

Theoretical Framework

The theoretical framework guiding this study is the Factors Influencing Teaching Choice, also referred to as the FIT-Choice Framework, developed by Watt and Richardson. The foundation of this framework is derived from the expectancy-value theory (Richardson & Watt, 2006). The FIT-Choice Framework was developed to explain the choice to teach as a career utilizing themes from teacher education and career choice literature (Watt & Richardson, 2007). The FIT-Choice Framework utilizes five influences on the decision to teach as a career. These influences include socialization influences, task perceptions, self-perceptions, values, and fallback career. The outcome of the five influencers is the choice to teach as a career (Watt & Richardson, 2007).

While the FIT-Choice Framework is the theoretical framework guiding the research, an additional model known as The Ag Ed FIT-Choice model will be the framework used to guide this

research. The Ag Ed FIT-Choice model was developed by Lawver (2009) as an adaptation of the FIT-Choice model created by Richardson and Watt (2006, 2007). The Ag Ed FIT-Choice model utilizes the same influencers for the decision to teach as the FIT-Choice model. However, the outcome of the influencers on the decision is not only to teach but to teach specifically in the field of agricultural education.

Research Questions

To determine the factors that influence males to teach agricultural education the following questions were developed:

1. What are the demographics of males choosing to major in agricultural education?
2. What factors affect males' pursuing an agriculture education degree and becoming an agriculture teacher?
3. Are there relationships between attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession of males pursuing an agriculture education degree?
4. What are the relationships of attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males and teaching and the characteristics of participants?

Significance of the Study

The absence of males in teaching has become a universal trend seen throughout all fields of education. The gender division in the teaching profession has impacts on the underachievement of boys in school and is also known as the 'boy crisis' in educational reform movements. A focus in educational reform movements is the idea of girls outperforming males

in school. The need for more males entering the teaching profession is most linked to two justifications, the idea of the gender gap in school performance with females outperforming males, and the need for young men to have strong role models (Johnson, 2008).

Trends in achievement gaps today have indicated that females outperform males in subjects such as reading and writing in larger percentages than males are noted to outperform females in math and science (Johnson, 2008). Gurian and Stevens (2005) report that as high as 70% of males earn the majority of D's and F's in school and on average males are a year to a year in a half behind females in reading and writing skills.

Males are reported to have higher dropout rates, with 80% of high school dropouts being young males (Johnson, 2008; Gurian & Stevens, 2005). Not only have males been reported to have an achievement gap, but males have been reported to make up 80% of discipline problems. Additionally, males make up 70% of the children diagnosed with learning disabilities and 80% of the children diagnosed with behavioral disorders. Today, of the school age children on Ritalin or similar drugs, 80% are males, with the number of males on Ritalin approaching 5 million in 2004 (Gurian & Stevens, 2005). These gender differences in achievement and discipline have been linked to gender differences in the brain, as discussed further in chapter 2, and serve as arguments for boy-friendly teaching practices to compensate for the 'feminized' environment in public schools (Johnson, 2008).

The second common justification for the need for more males entering the teaching profession is the idea of providing young males with strong role models. Today, over half of the young men in school are being raised without a father in the home, lacking male mentoring, thus causing major concern for boys facing undermotivation and low-grade learning in school. In addition to a concern for undermotivation and low-grade learning, young males lacking fathers

have been found to experience more physical and sexual abuse, emotional distress, higher dropout rates, act out more in school, end up in juvenile courts at higher rates, and have lower self-esteem and educational expectations (Gurian & Stevens, 2005).

In addition to a lack of fathers in the home, it is difficult for boys to develop healthy masculinity in a school environment filled with women teachers (Johnson, 2008). While mothers and teachers can contribute to males' learning, Gurian and Stevens (2005) state that women are unable to help young males with the male identity, or male self. Fathers, male mentors, and male teachers can only give boys the gift of male identity, which is passed through years of male involvement with male children. Thus, male teachers are essential to provide stable academic role models for young males and provide a positive attitude toward school to combat the dropout and poor achievement rates (Johnson, 2008).

An increase of male teachers in schools is needed to provide role models for young men in school. However, in today's education system there is an overall teacher shortage. Ball and Torres (2010), state the solution to the teacher shortage is the recruiting and retaining teachers in agriculture. With foundations in vocational education, and the notion of hands-on learning through the three-circle model, agriculture education provides instructional strategies which align with the way males learn (Phipps et. al, 2008; Gurian & Stevens, 2005). In chapter II, the idea of the male brain and how learning occurs in males is discussed further. The data shows that today more women are entering college preparation programs for agricultural education than males (Foster et. al, 2021).

Wright and Custer (1998), state that identifying and recruiting teachers is a concern that has been ongoing for more than two decades. To identify ways to recruit teachers it is important to understand the motivations for choosing teaching as a career, which not only has implications

for recruitment but also teacher education and curriculum design (Lavwer & Torres, 2011). Therefore, this study will work to fill gaps in literature on male's choice to enter the agricultural teaching profession by identifying factors affecting career choice.

Moreover, this study addresses research priorities four and five published by the American Association for Agricultural Education through the 2016-2020 National Research Agenda. Research priority four focuses on meaningful, engaged learning in all environments and the need to understand the diversity of students in today's classroom (Edgar et. al, 2016). The statements made in research priority four align with the need to recruit more males in the teaching field to close the gender gap in student achievement. With one in three children living in single parent homes, usually a working mother, the need for increasing male teachers to provide male role models for young boys is evident (Edgar et al., 2016; Johnson, 2008). The results of this study can enable agriculture education preparation programs to identify ways to recruit males into agricultural education majors. Thus, increasing the number of males entering the classroom which can affect the creation of meaningful learning environments for a diverse classroom, and provide male role models to young males.

Research priority five addresses the need to create efficient and effective agricultural education programs. The central mission of agricultural education programs is to prepare teachers in agriculture with a heavy focus on career exploration and college readiness for specific skills in agriculture (Thoron et al., 2016). The results of this study will provide information that can affect college preparation programs by identifying ways to recruit males into the profession. Factors determined from this study can also be utilized in school-based agriculture programs to help students determine career choice through career exploration of the teaching profession.

Definitions, Terms, Symbols, Abbreviations

- **Ag Ed FIT-Choice Model-** A model adapted from the FIT-Choice Framework that focuses on why individuals choose teaching agricultural education as a career (Marx et al., 2017).
- **Career and Technical Education (CTE)-** Educational programs that prepare youth and adults for a wide range of high-wage, high-skill, high-demand careers (Association for Career and Technical Education, 2023).
- **FIT-Choice Framework-** The Factors Influencing Teaching Choice framework that explains the choice to teach as a career with foundations in the expectancy-value theory and themes founded in teacher education and career choice literature (Richardson & Watt, 2006; Watt & Richardson, 2007).
- **National FFA Organization (FFA)-** A youth organization for students enrolled in school-based agricultural education programs; an intra-curricular component of agricultural education programs (Phipps et al., 2008).
- **School-Based Agricultural Education-** Formal education programs with instruction based in agriculture at the grade levels of K-12 (Miller, 2022).
- **Supervised Agricultural Experience (SAE)-** An intra-curricular component of agricultural education programs which provide students the opportunity to apply concepts learned in the classroom through individualized programs including but not limited to entrepreneurial, place, exploratory, and research programs (Phipps et al., 2008).
- **Three-Circle Model of Agricultural Education-** A model of education that focuses on educating students in and about agriculture through three components including classroom/laboratory, supervised agricultural experience (SAE), and FFA (Croom, 2008).

Summary

This chapter summarizes the context and need for this study. Agricultural education is offered within public schools to teach students in and about agriculture through a three-circle model including classroom/laboratory instruction, SAE, and FFA. The field of education historically has been dominated by males in both academics and specialized subjects such as agricultural education. Today, data shows that students entering college preparation programs for agricultural education are predominantly female, thus leading to a future of a female dominated field.

While the field of education has historically been dominated by males, today females outnumber the number of males in the profession. This gender division proves to have consequences on the 'boy crisis' seen within schools today. Today, most young men are growing up in households without fathers and lack male role models. These issues coupled with an increase of female teachers and a 'feminized' school environment have led to issues with young males including undermotivation and achievement in schools, higher dropout rates, and more males having behavioral issues at school. To combat these issues in education, there is a call to recruit and maintain male teachers.

The need to recruit more teachers into the teaching profession is a concern that has been occurring for decades, for both female and male teachers. To recruit more individuals into the teaching profession it is crucial to understand why individuals choose a career in teaching. This study focuses on recruiting males into the agriculture teaching profession. Agricultural education naturally leads to more male friendly teaching strategies due to the hands-on nature of the curriculum as seen through the three-circle model. Thus, recruiting more males into the agricultural teaching profession serves as the most vital way to increase more male teachers

within schools to serve as role models for young males. Therefore, the aim of this study is to identify the demographics of males choosing to teach agricultural education as well as the factors that affect males' decision to teach agricultural education.

CHAPTER II:

REVIEW OF LITERATURE

Chapter I discussed the context of the study by explaining school-based agricultural education. The purpose of the study to determine facts that influence males to teach agricultural education was also discussed. The FIT-Choice Framework and the Ag-Ed Fit Choice Framework were introduced as the conceptual frameworks guiding the research. The significance of determine factors that influence males to teach agriculture was also discussed.

This chapter offers a review of literature concerning males' choice to enter the teaching profession. The first section gives insight into school-based agricultural education including the history and an explanation of the three-circle model of agricultural education. The second section describes the philosophy behind agricultural education. Within the third section the roles of an agricultural educator are discussed in relation to the three-circle model and additional duties. This issue of teacher shortage is discussed in the fourth section. The fifth section discusses males in education including a historical outflow of male teachers and the factors that deter men from entering the teaching profession. The sixth section discusses the status of males in agricultural education and reasons for males leaving the profession. Within the next section the mindset of males is discussed including the factors which affect how males perform in school in relation to physical make-up of the male brain. Finally, the review of literature incorporates the theoretical framework related to the study including an explanation of the expectancy-value theory, the Fit-Choice Framework, and the Ag Ed Fit-Choice Framework.

School-Based Agricultural Education

School-based agricultural education refers to formal education programs with instruction based in agriculture at the grade levels of K-12, and agricultural educators are those who teach these student populations (Miller, 2022). Today these programs are most found at the middle school and high school level of education (grades 6-12). However, some states such as Georgia have created programs at the elementary level.

History of Agricultural Education

Agricultural education has foundational roots beginning in the early 1900s. From the early beginnings to the 1980s school-based agricultural education programs were viewed mainly as vocational education programs, which primarily focused on preparing individuals for entry into agricultural careers. Over time the view of agricultural education has shifted from vocational to career and technical education (CTE), which places an emphasis on career and literacy efforts. While CTE programs have a continued focus on work preparation, a new emphasis is on the incorporation of academics and an emphasis on careers requiring postsecondary education (Phipps et al., 2008).

Three-Circle Model of Agricultural Education

Phipps et al. (2008) discusses three main purposes of agricultural education including preparing individuals for agricultural careers, entrepreneurship, and agricultural literacy. According to Phipps et al. (2008), a comprehensive school-based agricultural education program should include all the purposes mentioned, which involve educating students in agriculture and about agriculture. To achieve educating students in and about agriculture, the integrated agriculture education model (see Figure 1), often referred to as the three-circle model, was

created. The three components include classroom/laboratory instruction, supervised agricultural experience (SAE), and the National FFA Organization (FFA). This model has been taught in the United States for over 100 years (Croom, 2008). According to Phipps et al. (2008) today's learning environment requires a solid instructional program in agriculture which emphasizes relevant science, math, and management concepts accompanied by well-planned laboratory instruction, contextual learning through SAE programs, and positive student leadership development experiences.

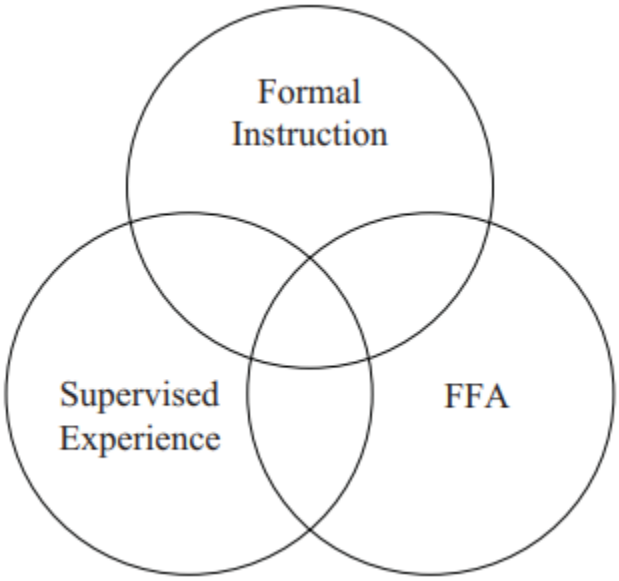

Figure 1. Diagram of the integrated three-component agricultural education model (Croom, 2008).

Classroom/Laboratory Instruction

Classroom instruction enables students to learn about specific areas of agriculture and natural resources, and as a result students can apply knowledge and principles learned to solve agricultural problems. Instruction in agriculture provides a foundation for students to understand, apply, and problem solve in laboratory and industry experiences. Laboratory instruction involves

learning activities within agriculture and natural resources. Students can perform experiments, scientific investigations, and perform hands on activities within agriculture. School laboratories can be indoor and outdoor and are dedicated to specific areas of agriculture, such as agricultural mechanics, floral design and production, vegetable production, large and small animal care, and forestry plots. Teacher demonstrations and student supervision enable effective laboratory instruction where students can develop psychomotor skills as they apply concepts learned through classroom instruction. Together classroom and laboratory instruction enable students' skill development in agriculture (Phipps et al., 2008).

Supervised Agricultural Experience

Supervised agricultural experience programs enable students the opportunity to apply concepts learned through classroom and laboratory instruction in real-world situations. SAE programs are a crucial component of agriculture programs and occur under the supervision of the agriculture teacher. Students can develop programs in entrepreneurial situations on the farm or in agribusiness situations. Opportunities to work for industry professionals in placement and exploratory situations as well as research-based projects also provide SAE opportunities for students. As students can gain experiences in their SAE programs, they develop specific skill sets in agricultural industries which enable them to progress toward agricultural careers. Through SAE experiences students can individualize their learning in agricultural areas of interest and teachers are able to provide individualized instruction (Phipps et al., 2008).

FFA

The National FFA Organization is a youth organization for students enrolled in school-based agricultural education programs. FFA is an intra-curricular component of agricultural

education in public schools. The focus of the National FFA Organization is to provide opportunities for members to develop premier leadership, personal growth, and career success. FFA members are given opportunities to further apply skills learned in the classroom, laboratory, and SAE experiences within FFA. FFA also provides opportunities for members to develop leadership skills working with people through individual and chapter programs and activities (Phipps et al., 2008).

Philosophy of Agricultural Education

Agricultural education focuses on problems associated with tasks in the agriculture and natural resources industry, making the curriculum flexible and constantly moving forward. Thus, agriculture teachers understand that instructional programs and student learning opportunities should be reflective of an ever-changing agriculture industry. The goals of instruction in agricultural education include finding practical applications and transfer of knowledge and skills into real-life situations. Agricultural education places a large emphasis on learning by doing, through hands on experiences found in classroom/laboratory instruction and SAE and FFA experiences. With an emphasis placed on learning experiences through SAE and FFA it is evident that agriculture teachers value the individual learner (Phipps et al., 2008).

Agriculture teachers also have responsibility in guiding and mentoring students on career decisions. Often agriculture teachers surpass the emphasis placed on career guidance provided by other teachers in students' academic life due to their emphasis on students' self-awareness and career awareness and decision-making abilities. Agriculture teachers also believe in teaching students the importance of leadership and citizenship skill development, through placing value on developing the whole student through interpersonal, subject area, and problem-solving

abilities. Agriculture teachers view FFA as the most important vehicle for developing students' leadership and communication skills (Phipps et al., 2008).

Agriculture teachers are also community oriented through the belief of serving the community in which they work, and the programs provided serving the community. Additionally, the agriculture program should reflect instruction in the scope of agriculture in the local community. To achieve this agriculture teachers should have interactions with the local community through business owners, extension educators, and community leaders (Phipps et al., 2008).

Roles of a School-Based Agricultural Teacher

School-based agricultural education programs include three main components, often referred to as a three-circle model, that include classroom and laboratory instruction, FFA, and SAE. With these three main components of a school-based agricultural education programs it is fair to analyze the roles of an agriculture teacher as a classroom/laboratory teacher, FFA advisor, and SAE supervisor (Miller, 2022).

Classroom/Laboratory Teacher

Of the three components of school-based agricultural education the most important role is that of the classroom/laboratory teacher (Miller, 2022). Researchers have found that most of an agriculture teacher's time amongst the three components of an agriculture program is spent on classroom and laboratory instruction (Torres et al., 2008). Within the role teachers spend considerable amounts of time planning lessons, whether utilizing professionally developed instructional materials, adapting professional curriculum, or creating instructional materials from scratch. Often, teachers utilize all three methods to create curriculum and to think through

lessons and organize resources to meet curriculum standards requires time and effort (Miller, 2022). The largest time spent in this role is working directly with students. Teachers generally work with students in classrooms and laboratories six hours a day five days a week. Teaching lessons and working with students also require student performance evaluation through feedback within lessons and formally through grading assignments. Teachers often spend time beyond the school day evaluating student performance and providing feedback through grading (Miller, 2022).

FFA Advisor

After the roles of teaching in the classroom and laboratory, serving as an FFA advisor is the second most important role of an agriculture teacher. Torres et al. (2008) found that first year teachers spend about 16% of their time on FFA responsibilities, whereas veteran teachers dedicate 24% of their time to FFA responsibilities. The functions of an FFA chapter in a well-established program are important to not only students and parents, but also to the community and school administration (Miller, 2022). The importance of FFA falls to the notion that FFA provides a place for students to develop leadership skills and apply concepts learned in the classroom through career development events.

FFA is the most public component of an agricultural education program and has been key in helping programs display the positive contributions to students and the community. To build opportunities for students, FFA chapters build a program of activities around three divisions including growing leaders, building communities, and strengthening agriculture. The program of activities, helping students develop leadership skills, and working toward competing in career development events require time and effort of the agricultural teacher, and sometimes it can become all consuming (Miller, 2022).

SAE Supervisor

Of the three components of an agricultural education program, SAE has the least amount of time commitment (Miller, 2022). Torres at al. (2008) found that experienced teachers committed approximately four percent of time and first year teachers spend approximately two percent of time. While teachers spend the least amount of time on SAE out of the three components, it does not mean that SAE is unimportant. SAE is an excellent opportunity for individual learning for students and a way to apply concepts taught in the agriculture classroom (Miller, 2022). The agriculture teacher's role in SAE requires supervision and mentorship throughout students' programs.

Additional Roles

In addition to roles associated with the three components of agricultural education, agriculture teachers take on many other roles. These roles include mentorship, serving the school, engaging the community, and being engaged in professional organizations. Agriculture teachers provide mentorship through classroom/laboratory instruction, instruction as an FFA advisor, and through guiding students with SAE programs. While agriculture programs are often physically separate from the school, it is important for developing relationships with students, parents, and the school community for agriculture teachers to become a part of the school atmosphere. This involves additional responsibilities such as hallway or lunchroom duty and attending school functions such as athletic events and award ceremonies.

Another essential role agriculture teachers take on is engaging the community. Teachers often work with community members through advisory council meetings and alumni programs to help foster volunteerism and support throughout the community. It is also important for

agriculture teachers to stay up to date with the agriculture industry and educational communities through participation in professional organizations such as the National Association of Agricultural Educators (NAAE) and the Association for Career and Technical Education (ACTE). These professional organizations provide teachers with services such as professional workshops, community connections with other teachers, curriculum materials, scholarships, liability insurance, advocacy on the federal and state level, and recognition for member accomplishments (Miller, 2022).

School Based Agricultural Education Program Student Make-up

McKim et al. (2018) conducted an analysis of school-based agricultural education with a population of American high school schools. According to the study, 60.9% of students enrolled in school-based agriculture education were male, while students in the sample enrolled in the public schools were mostly female (50.13%). The majority of students in the study were Caucasian (70.83%), followed by Hispanic (13.89%), and African American (8.98%). Additionally, the majority of students enrolled in school based agricultural education programs were in the mid to low socio-economic status (54.41%), followed by mid to high (29.27%), and lowest (14.31%) (McKim et al., 2081).

Teacher Shortage

Foster et al. (2021) states in the United States there are more than 13,000 people employed as a school-based agricultural teacher with approximately 1,500 jobs available each year. Historically, the need for school-based agriculture teachers has been equal to or higher than the number of qualified candidates to fill the positions. Foster et al. (2021) reported significant growth in school-based agriculture education from 2021-2022 with 382 new positions and 220

new programs added across the United States. Moreover, approximately 25% of newly qualified teachers are not immediately pursuing employment in the field (Miller, 2022). The combination of a high demand and fewer immediately entering the profession creates a shortage of teachers. However, this shortage also creates a high demand for those who have a degree in agricultural education and presents an opportunity for those aspiring to enter the teaching career (Miller, 2022).

A shortage of qualified school-based educators is not a new concept; therefore, the need me accurate data on the supply and demand of school-based agricultural education teachers in the United States is important for teacher educators and data-driven policy discussions (Foster et al., 2021).

Males in Education

Historically the teaching profession has been considered a traditional occupation for females (Rocca & Washburn, 2008). According to Johnson (2008), the proportion of male teachers in public schools is approximately a quarter of the nation's three million teachers, the lowest it has been in decades. In the United States, the percentage of males in the teaching profession has decreased by almost half. As early as 1870 40% of teachers in the United States were male, this percentage has dropped to 21% in 1990 (Johnson, 2008). Most recent data collected shows there were 3.8 million teachers in grades K-12 in the United States, and of those 23% were male. Thus, this data demonstrates a gender division in teaching professionals, and while the percentage of female to males in the teaching profession varies amongst counties, the data shows that it is a universal trend (Johnson, 2008).

Historical Outflow of Males in Teaching

While some literature accounts for males exiting the teaching profession due to the 'feminization' of the education system, there are also historical factors that can account for males leaving the classroom. During the colonial period and through the 19th century the teaching profession provided a stable and respectable job for middle-class men. As the country experienced economic growth through industrialization, new highly paid industrial jobs were created which paid higher salaries than teaching. As males exited the teaching profession to fill industrial jobs educational reformers began marketing teaching as 'women's work' to meet the demand for teachers. While this idea of marketing teaching as 'women's work' was beneficial in meeting the demand for teachers, it had long-term consequences on the teaching profession. As more women became teachers, the education profession was linked to domesticity, nurturance, and child rearing, thus, creating the idea that the teaching profession is more suitable for women than men due to the nature of caring for children (Johnson, 2008).

Reasons Men Decide Against Teaching

Today, the gender division in education continues. According to Johnson (2008), the research literature on the lack of male teachers discusses several common reasons for the gender division in the teaching profession including low wages, lack of prestige, and interaction with children. These themes are consistent with a study conducted by Cushman (2007) which notes factors such as poor salaries, social status of the teaching profession, and issues of working with students for reasons in which males are discouraged from entering the teaching profession.

Salary

The factor of salary in the teaching profession is complicated. Compared to other jobs in industry, teaching salaries remain relatively low. While additional benefits of working with children and the community may outweigh salaries for some teachers, the view of low salaries as compared to industry jobs have a different effect on men. According to Tyre (2008), teachers are amongst the lowest paid public employees, with an average salary of around $47,000 and an average starting salary of around $32,000.

Traditionally, men have held the viewpoint of the importance of being the primary wage earner in the family (Johnson, 2008). Over the last twenty years, the cost of college and the high price of real estate have further affected males view of salary associated with education. Tyre (2008) reports that 43 percent of teachers' starting salary is utilized to pay for student loans and rent. With the threats of student loans and rent and lower starting salaries, males feel that the benefits of teaching do not outweigh the need to have enough income to buy a home and support a family (Tyre, 2008).

Social Status

According to the literature, the educational professional does not have the same regard in society as careers such as medicine or law. The social standing of teaching has decreased throughout history because of the association with women and children. Research notes that male teachers are aware of the low status of the profession in comparison to other professions. Recent decades show a process of intensification, as teachers have become overloaded with duties outside of teaching such as paperwork, childcare duties, and health care duties, thus limiting teachers from professional growth in the teaching field. To compensate for the low status of

teaching, both men and women have turned to taking better paid and higher status positions within education such as in administration. Literature shows it is not unusual for males to leave the classroom for administrative type positions due to the traditional view that women teach, and men manage (Johnson, 2008).

Tyre (2008) reports that men are more likely to be promoted within the teaching profession than females. In elementary schools' males make up just nine percent of teachers but 44% of principals. The portion males in secondary schools are slightly higher with 35%, yet the percentage of male principals is even higher at 74% (Tyre, 2008).

Working with Children

The idea of caring for children professionally through the teaching profession has become a taboo that many men are hesitant to challenge due to fear of social repercussions from society. Society has placed pressure on men to avoid contact and being alone with young children due to the perceived possibility of inappropriateness. Literature shows this skepticism places stress on men who enjoy working with children. Additionally, the idea of caring for children has been argued to be a part of stereotyped lack of masculinity, placing further stress on males to be seen as a 'soft male' or feminine (Johnson, 2008). Tyre (2008) reports that men who do stay in the classroom often face gender decimation in the workplace. Whether from parents who do not wish to have their young children taught or left alone with a male figure or from other female coworkers who believe males do not hold the same values in education (Tyre, 2008).

Males in Agricultural Education

Agricultural education has historically been a male dominated field (Foster, 2001). As early as the 1980s there has been an increase in females entering the agricultural education field,

Knight (1987) found that 5.1% of agriculture teachers were female, contrasting the 45% of women in the teaching profession as reported by the United States Department of Labor Women's Bureau (1990). Over the last several decades there a shift into a more female driven field has been documented. Camp et al. (2002) reported the number of female agriculture teachers nationwide had risen to 22% and that 43% of newly qualified teachers of agriculture were female, which aligns with the department of labor's (2000) estimated 48% of the workforce being female by 2008. Lawver et. Al (2018) reported that from 2014-2016 males made up 57% of the agriculture education profession. Yet, most current data shows that 75% of new agricultural education graduates are predominately female (National Association of Agricultural Educators, 2020).

While little research on male's choice to teach agriculture is present within the literature, Williams (2021) found males deterred from teaching agriculture due to FFA and other extra-curricular activities. Additionally, male participants indicated that money, schedules, and the belief that the agriculture industry would offer a better career and salary were factors that prevented males from entering the teaching profession (2021).

The Mindset of Males

While research and literature discussed previously indicate reasons for males leaving the teaching profession, it notable to also discuss the difference in the way males learn and think. On average, the male brain responds to spatial-mechanical stimulation, making males more stimulated by diagrams, pictures, and moving objects rather than through words (Gurian & Stevens, 2005).

Research into the physical components of the brain have indicated differences between males and females. Within the brain, males process more blood flow in the cerebellum, the portion of the brain that controls physical action. Thus, males are more likely than females to attach learning to physical movement. Male brains have also shown less neural connectors in the temporal lobes than females, indicating that males need more sensory-tactile experiences to enhance learning. Males have also been found to have less oxytocin, chemicals that have a direct impact on the use of words, which prevent them from learning through sitting and talking. Rather, males form learning through action-response and hierarchical competition (Gurian & Stevens, 2005).

As education has changed throughout history, there has been a shift in how males perform in school. In schools today, there are trends of males earning poor grades, not performing well in class, and becoming discipline problems. Considering how the male brain is hard wired there are elements in how mismatch school has become for males. School that once focused on instructional methods such as apprenticeships, action, and practice through hands with physical movement has been replaced with learning through verbal means without physical movement (Gurian & Stevens, 2005).

The shifts in education and society have led to the ‘under motivated’ and ‘chronic underperformance’ labels associated with males in today’s schools. These labels are not only seen in academics with lower grades, lower participation, and behavioral issues within school but are also present in extra school activities, where males have been outnumbered by females in all areas except athletics. Males who underperform in school due to under motivation, linked to four areas the lives of males including the brain itself, the school system, family dynamics, and social stressors (Gurian & Stevens, 2005).

Under motivation in relation to brain function is related to the prefrontal cortex and emotion centers, when a male loses the "want" to learn, the connectors between these centers can cause shut down, cause the male to become learning depressed. Within the school system, classrooms mismatch between the learning brains of males causing under motivation to how they instruction is presented. Other difficulties in the classroom arise when males enter the rest state, when the male's brain is briefly shutting down to refresh neurotransmission and rest from stressors. The rest state presents itself as behaviors such as staring out the window, dozing off, and looking upward toward the ceiling, behaviors which are often associated with boredom. Under motivation also stems from issues occurring within family dynamics such as divorce trauma, abuse (physical, sexual, and/or emotional), and lack of attachment. Finally, under motivation is also present in males who grow up in deprived social conditions (Gurian & Stevens, 2005).

The shifts in the educational system are now beginning to affect the percentage of males entering post-secondary school. Today, the average graduating classes at four-year colleges are approaching 60% female. Additionally, the graduation rate favor women with more women earning college degrees at every level from associate to Ph.D. (Whitmire, 2010).

Expectancy-Value Theory

The expectancy-value theory is a major framework for achievement motivation that began with John Atkinson (Watt & Richardson, 2007). The foundation of the expectancy-value theory is the expectancy of achieving an outcome because of how much value is placed on the outcome and effort given to achieve the outcome (Schunk, 2012). Eccles et al.'s (1984, 2005a) expectancy-value theory states the most important motivations to predict academic choices and

behaviors are values and ability beliefs, with values being the most powerful predictor of choice and expectancy beliefs predict performance.

Schunk (2012) states that individuals are motivated to act when there is an attractive outcome combined with the individual's belief that the outcome is attainable. The expectation and value influence the effort an individual puts forth to perform and persist toward a given goal. Therefore, the expectancy-value theory aligns with the construct of efficacy, or a belief in oneself (Wigfield & Eccles, 2000). Bandura (1986) indicated students are more prone to choose a career in which they feel they can be successful, have their needs met, and have a positive influence on others.

Wigfield and Eccles (1992) discuss values in three components including intrinsic value, utility value, attainment value, and cost. According to Wigfield and Eccles (1992), intrinsic value is associated with the joy individuals get from carrying out tasks, utility value refers to the usefulness of the tasks to individuals, attainment value is associated with the importance of being successful on the task at hand, and cost is the sacrifice the individual incurs to carry out the task.

Schunk (2012) discusses the possibility of achievement motivation in children being dependent on factors found in the home environment. The notion of parental pressure to perform is an important influence on achievement motivation rather than parental desire for children to become independent (Schunk, 2012). In an investigation discussed by Schunk (2012) parents' interactions with sons were observed in which parents with high achievement motivation interacted more with the sons through rewards and punishments and held higher expectations of the children than those with low achievement motivation.

Thieman et al. (2016) states the expectancy-value theory demonstrates the relationship between students' career choice and the factors that support or diminish factors to the choice to teach. Further, the expectancy-value theory shows how individuals, events, and experiences can influence considerations of a career teaching agriculture (Thieman et al., 2016).

FIT-Choice® Framework

The FIT-Choice Framework, also known as the Factors Influencing Teaching Choice, developed by Helen Watt and Paul Richardson has foundations in the expectancy-value theory (Richardson & Watt, 2006). The framework has themes found in teacher education literature and career choice literature to explain the choice to teach as a career (Watt & Richardson, 2007). The development of the scale used in the Fit-Choice Factors was guided by self-value and task variables which predict choices in the expectancy-value model developed by Eccles et al. along with items for socialization and previous experiences as identified in the expectancy-value theory (Watts & Richardson, 2007). Self-perceptions of ability were identified through questions about participants perceptions of teaching abilities, constructs for the expectancy-value components, intrinsic, attainment, and utility values were also created for values (Watt & Richardson, 2007). Items which address individuals' interest in teaching were created to assess intrinsic values, attainment value assess the extent individuals considered the importance of task in relation to personal goals, and subjective goals assess reasons for choosing teaching as a career (Watt & Richardson, 2007).

Watt and Richardson (2007) developed the component subjective attainment value, named personal utility value, to include constructs such as time for family, job security, and job transferability. Time for family was measured by the extent in which participants chose teaching because of the allowance for more time for family. Other studies found that extrinsic rewards

such as salary, job security, and job status were also important factors in the decision to teach (Bastick, 2002; Brown, 1992; Young, 1995). Watt & Richardson (2007) developed the construct to assess participants motivation of choosing teaching based on job security, reliability of income, and having a steady career path.

An additional construct developed by Watt NS Richardson (2007) was bludging, an Australian term for individuals choosing the easiest option available. Within the context of teaching, Watt and Richardson (2007) describe bludging based on the perception of a teacher's workday and school holidays. Bludging belongs with constructs designed to assess personal utility value, as it refers to an individual's choice to teach based on low effort (Watt & Richardson, 2007).

The construct utility value was renamed as social utility value, to relate to the desire to make social contributions by giving back to society by becoming a teacher (Watt & Richardson, 2007). The social utility value construct includes values such as social contribution, enhancing social equity, and shaping and working with children/adolescents (Watt & Richardson, 2007). The idea of working with children and adolescents has been called intrinsic and altruistic motivations and tend to be the dominate reason men and women choose to teach in the United States (Brookhart & Freeman, 1992).

Task perceptions, in the context of teaching, consist of task demand and task return components. Task demand contains two constructs, expert career and high demand, which analyze participants views of teaching as needing high level of specialized knowledge and teaching as requiring a heavy workload with high emotional demand (Watts & Richardson, 2007). Task return contains three constructs including social status, teacher morale, and salary.

These constructs analyze participants ratings of the extent teaching is viewed as a high-status career with the ability to earn a good salary (Watts & Richardson, 2007).

Socialization constructs relating to prior teaching and learning experiences as well as influences of others were also developed. These influences are represented in two constructs, prior teaching and learning experiences, and social influences (Watts & Richardson, 2007). The last construct included is the idea of teaching as a fallback career, where individuals have chosen teaching when they have failed to be accepted into the career of choice. This construct reflects individuals not choosing teaching but rather defaulting to it (Watts & Richardson, 2007).

The FIT-Choice model framework (see Figure 2) describes five influences on the decision to select teaching as a career including socialization influences, task perceptions, self-perceptions, values, and fallback career (Watt & Richardson, 2007). Within the model the choice of teaching as a career is an outcome variable represented on the far right of the model (Watt & Richardson, 2007).

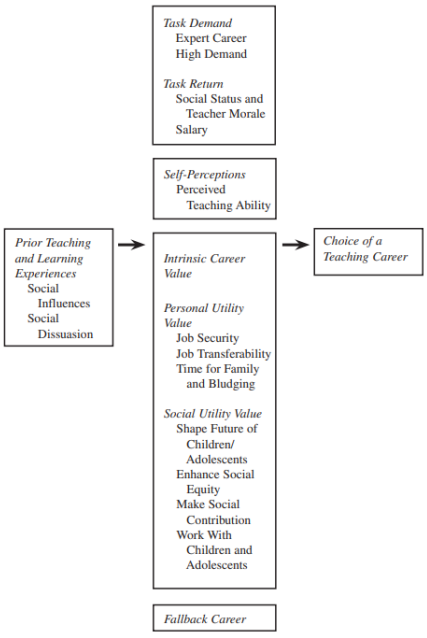

Figure 2. Theoretical model guiding development of Factors Influencing Teaching Choice (FIT-Choice) factors, Watt and Richardson (2007).

Socialization influences refer to positive teaching and learning experiences, and individuals such as family, teachers, and colleagues who may influence individuals' choice to teach (Watt & Richardson, 2007). Task perception influences are broken into two factors including task demand and task return. Task demand factors are the perceptions of teaching as a demanding and technical career requiring specialized knowledge (Watt & Richardson, 2007). Task return refers to the perceptions of the teaching career as a well-respected and high-status career in which society has positive views of the career and fair compensation is provided through salary (Watt & Richardson, 2007). Watt and Richardson (2007) describe self-perceptions as individual's perceptions on ability to teach. Within the model, values are separated into three expectancy-value components including intrinsic, personal utility, and social utility values (Watt & Richardson, 2007). Intrinsic values are the desires for a teaching career; whereas personal utility refers to the quality-of-life teaching can offer, including values such as family time, job security, income, and opportunities. Social utility values refer to the desire of individuals to contribute to society by influencing the lives of others (Watt & Richardson, 2007). Influences of fallback career accounts for those who did not choose teaching as a first choice in careers but have chosen the career as a fallback.

Ag Ed FIT-Choice® Framework

The Ag Ed FIT-Choice model (see Figure 3) was adapted from Richardson and Watt (2006, 2007) FIT-Choice model by Lawver (2009). While the FIT-Choice model focused on why individuals chose teaching as a career, the AG Ed FIT-Choice model focuses on why individuals use teaching school based agricultural education as a career (Marx et al., 2017).

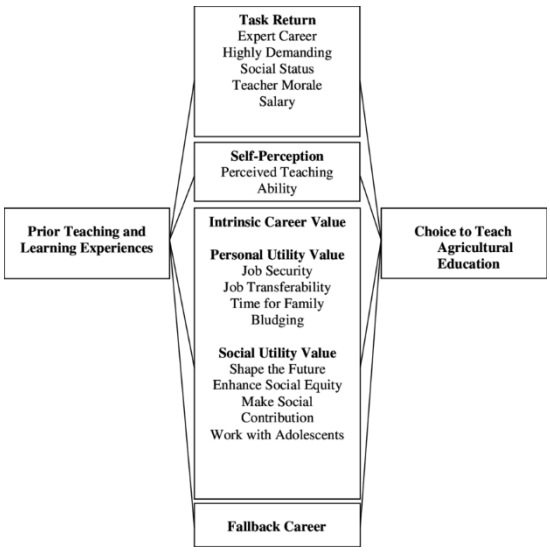

Figure 3. Ag Ed Fit-Choice Model, Lawver (2009) adapted from Richardson and Watt (2006) and Watt and Richardson (2007).

Consideration of Teaching as a Career

The issue of teacher shortage in education over the decades has led to research in ways to recruit more into the profession. The need to identify ways to identify and recruit teachers is a concern that has been ongoing for several decades (Wright & Cluster, 1998). According to Miller (2022), individuals seeking to become school-based agricultural teachers are motivated by intrinsic and altruistic factors. Aspiring school-based agriculture teachers typically have a strong interest in agriculture, view the profession as challenging, enjoy learning, and view teaching as an opportunity to serve others. Extrinsic factors such salary and benefits, resources, and job security motivate individuals to become school-based agricultural teachers. Yet, the most influential factors found to motivate individuals to pursue teaching are intrinsic and altruistic factors (Miller, 2022).

Research conducted over the years to identify factors that influence individuals' choice to teach. Several studies have been conducted to investigate choices to enter the profession at the

pre-service level including those in secondary and post-secondary agriculture programs. Through review of the literature, three common themes emerged as reasons for choosing to teach including social/personal value, stability of career, and influence of others and experiences.

Social/Personal Value

Marx et al. (2017) discusses selecting teaching as a career choice through an umbrella of motivation. Kyriacou and Coulthrad (2000) indicated that altruistic, intrinsic, and extrinsic motivations form reasons for teaching. Moreover, Lawver and Torres (2011) found that intrinsic factors and a drive to pursue teaching as the greatest predictors of career choice. Research shows that many students demonstrate an intrinsic career value and have a passion for education (Ingram et al., 2018). Theiman et al. (2016) found that participants perceived the field of education as an enjoyable career indicating a calling to teach. Marx et al. (2017) found that while respondents indicated a desire to teach, there was a lack of passion for teaching subjects other than agriculture. This viewpoint aligns with the findings of Ingram et al. (2018) in which respondents indicated a desire to teach due to a passion for agriculture and a desire to share that passion. Ingram et al. (2018) further discusses that respondents identified themselves as advocates for agriculture and that teaching youth about agriculture is the best way to serve as an agriculture advocate.

In addition to having an intrinsic value of education and agriculture, studies have also indicated an intrinsic value of the tasks of teaching. Marx et al. (2017) found that despite negative societal views of teaching, respondents drew a positive outlook on the career field through observations of strong teacher morale among colleagues. Participants valued the support network found within school based agricultural education, thus continuing to solidify the decision to teach (Marx et al., 2017). Moreover, research has shown that the high task demand of

teaching agriculture has intrinsic value for those who choose to teach. Marx et al. (2017) found that the while the combination of managing lesson planning, classroom management, and promoting the program is highly demanding, it also showed respondents that agriculture is ever-changing, and respondents felt teaching would never become boring. Lawver and Torres (2011) found that participants valued the complexity of the skill set required to teach agriculture. Respondents further discussed the appreciation of the need for high-level specialized and technical knowledge needed to be successful in the field of agriculture education (Lawer & Torres, 2011).

While intrinsic motivation has shown as the greatest contributor to the decision to teach, altruistic motivation has also shown to be an indicator for the choice of a career in education. Ingram et al. (2018) found that participants showed a sense of altruism, indicated that becoming an agriculture teacher provided an opportunity to have a positive influence in the lives of others. Participants went on to discuss that agricultural education provided unique opportunities to impact the lives of students over any other subject (Ingram et al., 2018). Through research, the social value of influencing others is prevalent. Thieman et al. (2016) found the opportunity to help with youth development and have an impact by providing service to others as an important indicator in participant's choice to teach. Marx et al. (2017) found the most influential factors amongst participants was the perceived social utility value of teaching, particularly the influence agriculture teachers have on their students.

Career Stability

Another factor influencing individuals' decision to teach is the perception of teaching as a stable career option. Elfers et al. (2008) discusses the historical viewpoint of education as a career field with high stability and job security, like other public service fields such as nursing.

Job security as a decision factor to teach has been noted in research since the 1990s (Bastick, 1999). According to Lawver and Torres (2011), job security refers to a steady career path with reliable income and a secure job. Marx et al. (2017) found that participants noted the nationwide need for agriculture teachers and viewed this as a sense of job security. Moreover, some females indicated the flexibility that teaching offers as a benefit to future family life, for example, being on the same schedule as their children (Marx et al., 2017). Ingram et al. (2018) also found respondents to identify factors such as opportunities for family and hobbies as a factor influencing the decision to teach. Participants indicated that being an agriculture teacher would enable them to pursue a lifestyle that was in harmony with personal values and goals (Ingram et al., 2018). Other factors that relate to career stability include the draw of salary and benefits as well as opportunities for advancement within the career field (Harms & Knobloch, 2005).

Influences of Others and Experiences

Throughout the research, participants have indicated the value of social influences in the decision to teach. Ingram et al. (2018) discussed the range of key influencers of the participants ranging from spouses, former teachers including FFA and 4-H advisors, to close relatives. Theiman et al. (2016) found that parental support of a career in agricultural education was a significant influencer in the decision to teach, which was supported by numerous other studies (Faulkner et al., 2009; Marx et al., 2014; Rocca & Washburn, 2005; Vincent et al., 2012; Wahl & Blackhurst, 2000). More specifically, high school students indicate the mother as the most influential individual in career decision (Thieman et al., 2016; Faulkner et al., 2009; Marx et al., 2014; Rocca & Washburn, 2005; Wahl & Blackhurst, 2000).

Thieman et al. (2016) found another powerful influence on the decision to teach is students' perception of the agricultural teacher as a role model. This finding supports the

literature that discusses the influence agriculture teachers have on students' choice of majoring in agricultural education in college (Hillison et al., 1986; Marx et al., 2014). Ingram et al. (2018) found that encouragement from agriculture teachers was not always verbal, rather the experience of watching agriculture teachers impact other students, creating the desire to have that same impact on others. Aligning with Park and Rudd (2005) statement about agriculture teacher's ability to influence many decisions of students' career through actions and instruction. Ingram at el. (2018) found that regardless of participant's experiences in agricultural education programs a common theme among participants was the encouragement of agricultural teachers and the positive comments teachers made about the profession. In addition to speaking positively about the profession, agriculture teachers directly encouraged the consideration of teaching as a career, showed students the joy of teaching, and took personal interest in the students (Ingram et al., 2018). Ingram et al. (2018) also found students with negative experiences in the agricultural education program still had a sparked interest in teaching to provide better opportunities for future students.

Another influence on the consideration of becoming an agriculture teacher is through the experience of students. Ingram et al. (2018) found that experiences through FFA including participation in leadership events at conventions and conferences, participation in career development events, and participation in teach-ag workshops served as motivators to pursue teaching agriculture as a career. Thieman et al. (2016) and Marx et al. (2014) found participating in career development events to be the most powerful influencer in choosing to teach and participation in specialized leadership workshops as significant predictors. Through experiences in a quality agriculture program students have found to develop self-efficacy in teaching.

Participants in Ingram et al.'s (2018) study shared the agriculture program provided skills and experience which developed confidence in becoming a successful agriculture teacher. Furthermore, the experiences in the agriculture program developed personal connections and a passion for agricultural education, igniting a desire to continue staying connected with agriculture and agricultural education (Ingram et al., 2018). Experiences post-high school such as internships with industry and serving in leadership positions at the state level with FFA continue to solidify decisions to teach for participants (Ingram et al., 2018).

Regardless of a student's participation in an agricultural education program, prior experiences with teaching in formal, non-formal, or informal environments can shape the choice to teach (Marx et al., 2017). Participants also reported to have positive encouragement and interactions with those in the teaching profession throughout their academic career, regardless of subject matter (Marx et al., 2017). Participation in non-formal teaching experiences such as serving as youth camp counselors or overseeing adult education, and overall positive experiences working with youth influence decisions to teach (Marx et al., 2017). Through these positive experiences a passion for teaching was sparked in participants, but the passion for teaching agriculture was often driven by previous experiences in the agriculture field, whether through family involvement in production agriculture or through working with the community through programs such as 4-H (Marx et al., 2017).

Summary

School-based agricultural education programs are designed to educate students about and in agriculture in grades K-12. Although, most states focus on programs beginning at middle school and high school (grades 6-12) levels of education. Agricultural education focuses on career preparation and agriculture literacy through instruction in the three-circle model including

classroom/laboratory instruction, supervised agricultural experience, and FFA. As an agricultural educator, teachers take on responsibilities as a classroom instructor, SAE advisor/mentor, and FFA advisor in addition to the traditional duties associated with the teaching profession. As educational reforms have presented themselves over time, agricultural education has moved from a vocational focus of career preparation to career and technical education which emphasizes the incorporation of academics and preparation for careers that require post-secondary education.

Teacher shortages have plagued the nation over the last several decades, including the discipline of agricultural education. Traditionally, the field of education has been dominated by women for several factors. However, the discipline of agricultural education has primarily been a male dominated field. Yet, statistics today show that even the field of agricultural education is becoming more female driven as the rate of graduates enter teacher preparation programs at the post-secondary level become heavily female dominated.

Literature has shown a historical outflow of males leaving the teaching profession or choosing not to enter the profession. Many of these factors are associated with salary, social status, and working with children. Additional factors associated with males leaving the teaching profession and not performing well in schools relate to the physical make-up of males' brains. Literature regarding male brain science indicate that males' brains have several differences in their make-up compared to females. This difference in physical anatomy affects the way males perceived knowledge and learn. Research shows that males respond better to learning when it is associated with physical movement, something that is mismatched with the way school classrooms are set-up today. Classrooms today require students to sit for long periods of time and absorb words presented through instruction, a method of learning that is not suitable for the chemistry of the male brain. While classrooms today may not be compatible with the way males

learn, this may be a benefit to agricultural education due to the vocational and hands on nature of instruction included in the three-component model.

Many factors affect individuals' choice to enter the education field, such as social/personal value, career stability, and the influence of others. The expectancy-value theory explains the choice to teach through values and perceptions of self-ability. The Fit-Choice Model has been utilized to determine preservice educators' choice to enter the teaching profession and the Ag-Ed Fit Choice Model focuses on preservice educations choice to enter the agricultural education teaching profession.

CHAPTER III:

METHODOLOGY

Chapter I described the context of the study and purpose of determining the factors that affect males' decision to teach agricultural education. The lack of male mentors for young males in schools was discussed. The FIT-Choice Framework and the Ag-Ed FIT-Choice framework was discussed as frameworks guiding the research of this study. Additionally, definitions of terms and abbreviations were presented.

Chapter II discussed literature that supports the purpose of the study. Literature discussing school-based agriculture programs, teacher shortage, males' decision to teach, males' mindset, and factors found to influence individuals' decision to teach as a career was presented. Additionally, the theoretical framework of expectancy-value theory, the FIT-Choice Framework, and the Ag-Ed FIT-Choice framework was discussed.

Chapter III focuses on the methodology of the study. The purpose of the study, research questions, descriptions of the population and instrument, data collection procedures, risks, and data analysis used will be discussed.

Purpose of the Study

Over the last several decades, the educational field has faced a shortage of teachers needed to fill positions. This shortage can be seen across all levels including academic and specialized subjects (Foster et al., 2021; Miller, 2022). In addition to the teacher shortage there is a gender division among those applicants who are filling positions, largely dominated by females. While males have historically dominated the field, over time the number of females entering the field have outnumbered male teachers (Johnson, 2008).

Within the literature, the lack of male teachers has been linked to the undermotivation of males. With a lack of male figures in the household and an over feminized school environment, a trend of young men becoming underachieving in the classroom, higher dropout rates, and behavior issues with males has become apparent in the education system. To combat the gender gap in achievement and the lack of male role models for young men, a need to recruit male teachers has become prevalent in educational literature. Having more male teachers will provide a way to increase young male's viewpoints on school, close achievement gaps, and help young men to develop healthy masculinity traits (Johnson, 2008; Gurian & Stevens, 2005).

Agricultural education programs focus on teaching students in and about the field of agriculture while preparing students for careers. Agriculture education programs focus on teaching through a three-circle model that incorporates classroom/laboratory, SAE, and the National FFA Organization (FFA) (Phipps et al., 2008). The incorporation of these three components within the field of agriculture provide teaching strategies that are suitable to the way males learn. With the applications of curriculum such as mechanics, natural resources, animal science and plant science, students have more accessibility to hands-on learning, which mimics the best strategies proved for males to attach learning (Gurian & Stevens, 2005), as further discussed in chapter II.

Therefore, the purpose of the study was to determine the factors that affect males' choice to teach agricultural education. Research questions focused on understanding the demographics of males who choose to teach agricultural education, the factors that affect males' decision to teach agricultural education, and the relationships between factors that affect males' decision to teach. Understanding these questions can provide information to help agricultural education preparation programs at the post-secondary level attract and recruit more males into their

programs to increase the number of males entering the agriculture education teaching field (Lavwer & Torres, 2011).

Research Questions

The following questions were developed to guide the research of this study:

1. What are the demographics of males choosing to major in agricultural education?
2. What factors affect males' pursuing an agriculture education degree and becoming a secondary school agriculture teacher?
3. Are there relationships between attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession of males pursuing an agriculture education degree?
4. What are the relationships of attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males and teaching and the characteristics of participants?

Research Design

Quantitative research methods were selected for this study. Quantitative research methods are used to study cause, effects, and relations of phenomenon and can be conducted as non-experimental research (Ary et. al, 2010). A descriptive-correlational research design was utilized as a form of non-experimental research. Descriptive-correlational research often uses questionaries to gather information from groups of individuals (Ary et al., 2002).

Population

The target population for this study are male agricultural education students enrolled in teacher preparation programs. Institutions offering agricultural education programs at the

secondary level were identified through the National Association of Agricultural Educators website (naae.org). A convenience sample of eight institutions in the Southeastern United States were used in this study. Eight states within the Southeastern United States were selected and no more than two institutions per state offering agricultural education programs were selected a priori.

Instrumentation

This study utilized a questionnaire to gather data. According to Ary et al. (2010) using administered questions increases the probability of receiving high response rates. An electronic questionnaire was utilized. The data collection instrument utilized in this study was the Ag-Ed FIT-Choice Instrument developed by Lawver (2009). The Ag-Ed FIT-Choice Instrument was developed by adapting the original FIT-Choice Scale developed by Watt and Richardson (2007). The FIT-Choice Scale was created to measure beliefs, attitudes, and intention of teacher candidates (Richardson & Watt, 2006). After reviewing the Fit-Choice scale, agricultural education and teaching literature, Lawver (2009) developed the Ag-ED Fit Choice Instrument through the addition of the term "Agriculture" to the statements in the questionnaire.

Additionally, Lawver (2009) adapted the instrument through modifications to the response choices. The original FIT-Choice instrument developed by Watt and Richardson (2007) utilized a seven-point Likert scale with response options ranging from 1=not at all important to 7=extremely important. Due to the number of items included in the instrument, Lawver (2009) reduced the response choices to a five-point Likert scale with choices including: 1= definitely disagree, 2= disagree, 3= neutral, 4= agree, and 5= definitely agree. Lawver (2009) utilized Dillman's (2007) Tailored Design Method as a guide for developing the instrument.

The Ag-Ed Fit Choice Instrument is composed of three sections including attitude toward becoming a secondary school agricultural education teacher, beliefs about teaching, and intent to teach. The first section of the instrument includes 40 statements to collect data regarding students' attitude toward becoming an agricultural education teacher and began with the stem "I want to become a high school agriculture teacher because". Section 2 utilized 15 items to collect data relating to students' belief about teaching and began with the stem "Compared with other professionals". The third section included six statements about students' intent to teach, measuring students' social dissuasion and career choice satisfaction. The final section of the Ag-Ed Fit-Choice Instrument included 11 items that were designed to collect personal characteristics and background experiences of the respondents. Information regarding sex, perceived agricultural experience compared to peers, years enrolled in school-based agricultural education courses, FFA membership, participation in SAE, and years of 4-H members was collected (Lawver, 2009).

Adaptations to the Ag-Ed Fit-Choice Instrument included adding a fourth section to evaluate the role of males in the field of education. The fourth section was developed after review of literature on the role of males in education. This section included fifteen questions focused on constructs including salary, social status, working with adolescents, and the male mental mindset. Additionally, the demographic section of the instrument was modified. The demographic section of the Ag-Ed FIT-Choice instrument was designed to collect personal characteristics and background experiences. Adaptations to the demographic questions included information regarding respondent's level of school within the institution, household makeup, gender and make-up of school-based agriculture program teachers/FFA advisors as well as 4-H

leaders, mentorship, level of participation in FFA, SAE involvement, and desire within agriculture education curriculum.

Written permission from Dr. Helen Watt, developer of the FIT-Choice instrument, and Dr. Rebecca Lawver, developer of the Ag-Ed FIT-Choice instrument, was granted, allowing the AG-Ed FIT-Choice instrument to be utilized and adapted for this study.

Validity of the Ag-Ed Fit-Choice Instrument

Validity of instruments utilized in research is important to determine if the conclusions being drawn in the study are valid (Ary et al., 2010). In quantitative research, validity determines that the instrument utilized measures what is intended to measure (Patton, 2002). Lawver (2009) utilized three types of evidence to determine the validity of the Ag Ed Fit-Choice instrument. First, a panel of experts consisting of seven-university faculty members from across the United States and Australia were utilized to review the instrument and address face, construct, and content validity (Lawver, 2009). Lawver (2009) determined construct validity by identifying underlying sub-constructs from FIT-Choice literature and through consultation of the dissertation committee. Additionally, members of the dissertation committee and a panel of experts reviewed the instrument for content validity by reviewing the construction of the FIT-Choice scale and placing questions into relevant sub-constructs (Lawver, 2009). Lawver (2009) selected panelists based upon specialties including secondary school agricultural education teaching experience, knowledge of teacher education, proficiency in the development of the FIT-Choice Scale and expertise in the subject matter.

The validity of the adaptations to Ag-Ed Fit Choice instrument including the addition of the fourth section and modification of demographic questions were reviewed by the dissertation committee.

Reliability of the Ag Ed Fit-Choice Instrument

Reliability refers to the stability of an instrument over time (Borg & Gall, 1989). Ary et al. (2002) suggest utilizing a pilot test to help clarify or eliminate items. Lawver (2009) conducted a pilot test with freshman level agricultural education students (n = 29) at the University of Missouri. To estimate the reliability of the Ag Ed Fit-Choice questionnaire Cronbach's' alpha was utilized as it is the most common form of internal consistency for an estimate of reliability (Ary et al., 2002). For the section measuring attitude about teaching a Cronbach's' alpha of .91 was found. The section on beliefs about teaching resulted in a Cronbach's' alpha of .71. Cronbach's' alpha was also utilized to estimate the reliability of the sub-constructs of the Ag Ed FIT-Choice questionnaire and resulted in .90 for shaping the future of adolescents to .52 for job transferability.

The Ag Ed-Fit Choice instrument was adapted to fit the needs of this study with the addition of a fourth section related to males in education as well as modification to the demographic questions. A pilot study of the modified Ag Ed-Fit Choice instrument (n = 26) was conducted with male agricultural education students enrolled at Ohio State University, the Pennsylvania State University, and the University of Nebraska- Lincoln. Faculty members at each institution were contacted and invited to participate in the pilot study. Faculty members were provided with an electronic link to the questionnaire, which they provided to the male students enrolled in their program. This group was selected due to their similarity to the target population.

Cronbachs' alpha was utilized to estimate for reliability of the modified Ag Ed-Fit Choice questionnaire from data collected during the pilot test (n = 26). The resulting Cronbach's alpha was .71 for the section-measuring attitude, .79 for the beliefs about teaching section, .44 for the decision to teach section, and .64 for the male's role in education section (see Table 1).

Table 1

Reliability Estimates for Summated Attitude, Beliefs, Decision, and Males and Teaching of the Ag Ed FIT-Choice Instrument (n = 26)

Construct	Number of Items	*alpha*
Attitude	40	.71
Beliefs	15	.79
Decision	6	.44
Males and Teaching	15	.64

Cronbach's' alpha was used as an estimate for reliability of the sub-constructs of the Ag Ed FIT-Choice questionnaire from the data collected during the pilot test (n = 26). Table 2 shows the results of the Cronbachs' alpha. The results of the procedures ranged from measuring social contribution at .88 to intrinsic career value at .07.

Table 2

Reliability Estimates for Sub-constructs of the Ag Ed FIT-Choice Instrument (n = 26)

Construct	Number of Items	*alpha*
Make Social Contribution	3	.88
Satisfaction with Choice	3	.84
Salary	2	.81
Expert Career	3	.77
High Demand	3	.76
Teacher Morale	3	.74
Job Security	3	.66
Shape the Future of Adolescents	3	.65
Enhance Social Equity	3	.64
Time for Family	3	.61
Work With Adolescents	3	.60
Social Status	3	.59
Social Influences	3	.51
Male Mental Mindset	3	.50
Male Role Models	3	.50
Job Transferability	3	.48
Male Social Status	3	.45
Fallback Career	3	.45
Ability	3	.43
Male Working with Adolescents	3	.43

Table 2 *(continued)*

Prior Teaching and Learning Experiences	3	.42
Social Dissuasion	3	.25
Male Salary	3	.08
Intrinsic Career Value	3	.07

Data Collection

After adaptations were made to the instrument and pilot testing, the researcher obtained approval from the Institutional Review Board (IRB) at Murray State University. Dillman's (2007) Tailored Design Method suggests five points of contact for data collection with mailed questionnaires including: a pre-notice letter, mailed instrument, thank you/reminder postcard, first replacement instrument, and an invoking special response. A modified version of Dillman's Tailored Design Method was utilized, limiting the contacts to three contacts including a pre-notice letter, emailed instrument, and a thank you/reminder.

Faculty members at Abraham Baldwin Agricultural College, University of Georgia, Mississippi State University, University of Mt. Olive, North Carolina State University, University of Tennessee, Murray State University, and West Virginia University were contacted by the researcher and invited to participate in the study. The faculty members contacted to assist with the study were identified via the researcher and dissertation committee.

Faculty members were contacted via email in August 2023 and invited to participate in the study. Upon agreement to participate in the study a pre-notice letter was sent via email containing information regarding the purpose of the study, data collection procedures, responsibilities of the faculty members and a timeline for completion.

After the pre-notice letter was sent, an email was sent in October 2023 to faculty members at each participating university with an introduction statement and a link to an electronic instrument. A third contact was made in via e-mail in November 2023. This contact-included information regarding the purpose of the study with instructions and served as both a thank you and a reminder to have students complete the electronic instrument.

Risks

The electronic instrument developed in Qualtrics was set with security settings to ensure anonymity. Search engines were blocked from being able to include results in their research results. File access was limited to only the researcher. Responses were set for anonymity by not collecting the respondents IP address, location data, and contact information.

Additionally, the link to the instrument was sent to faculty members at each participating institution. Those faculty members then distributed the link to their students. The researcher did not have access to student email addresses. Participants were made aware that participation in the study was voluntary through signing an informed consent.

This study utilized convenience sampling; thus, non-response error was not a concern in this study. To encourage participation from institutions, the researcher personalized emails to each university faculty member who agreed to participate in the study.

Data Analysis

The collected data were entered into Microsoft Excel by the researcher and analyzed using SPSS for Windows XP software.

Research Question 1- What are the demographics of males choosing to major in agricultural education?

Descriptive statistics were utilized to analyze the characteristics of males majoring in agricultural education. Frequency and percentages were utilized to describe nominal data. Characteristics included perceived agriculture experience, years in school-based agricultural education, number and gender of agriculture teachers within school-based agriculture program attended, years of membership in FFA and/or 4-H, and family structure.

Research Question 2- What factors affect males' pursuing an agricultural degree and becoming a secondary school agriculture teacher?

Descriptive statistics were utilized to analyze the interval data. Means and standard deviations along with frequencies and percentages were reported to describe the level of importance of each as perceived by the respondent. The following real limits of levels of agreement were used as a guide for data analysis (see Table 3).

Table 3

Level of Agreement Real Limits

Scale	Anchor
1.00-1.49	Definitely Disagree
1.50- 2.49	Disagree
2.50 – 3.49	Not Sure
3.50 – 4.49	Agree
4.50 – 5.00	Definitely Agree

Research Question 3- Are there relationships between attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession of males pursuing an agriculture education degree?

Correlations were utilized to analyze the relationships between attitudes toward becoming an agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession on the decision to teach of males pursing an agriculture education degree. Pearson's Product Moment and point biserial correlation were used to represent the correlation coefficient, represented by the term *r*, reported in both magnitude and direction.

The magnitude of the correlations was determined using Davis' (1971) defined correlations. Davis (1971) defines correlations between .01 and .09 as negligible, .10 to .29 as low, .30 to .49 as moderate, .5 to .69 as substantial, .70 to .99 as very high, and 1.00 as perfect.

Research Question 4- What are the relationships of attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males and teaching and the characteristics of participants?

Correlations were utilized to analyze the relationships between attitudes toward becoming an agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession and characteristics of the participants. Pearson's Product Moment and point biserial correlation were used to represent the correlation coefficient, represented by the term *r*, reported in both magnitude and direction.

The magnitude of the correlations was determined using Davis' (1971) defined correlations. Davis (1971) defines correlations between .01 and .09 as negligible, .10 to .29 as low, .30 to .49 as moderate, .5 to .69 as substantial, .70 to .99 as very high, and 1.00 as perfect.

Summary

This chapter discussed the methods used to address the research questions. Throughout the chapter the research design, population and participants, instrumentation, data collection, and analysis of data were presented. The chapter also discussed the methods used to minimize threats to validity, reliability, and confidentiality.

This study utilized a descriptive-correlational research design method to determine the factors that affect males' decision to teach and analyze relationships between factors and males' decision to teach. The study's population included males enrolled in agricultural educational programs. A convenience sample of institutions within the Southeastern states of the United States was utilized.

This chapter also reported the analysis of data through SPSS for Windows XP software. Analysis of the first research question involved descriptive statistics and was reported utilizing frequencies and percentages. The analysis of the second research question also utilized descriptive statistics of the interval data and standard deviations, means, frequencies, and percentages were reported. Finally, the analysis of the third and fourth research questions utilized correlations and Pearson's Product Moment were utilized for reporting. Chapter IV will present the results of this study.

CHAPTER IV:

FINDINGS AND ANALYSIS

Chapter I discussed the purpose of the determining the factors that affect males' decision to teach agricultural education. Throughout the chapter, a lack of male mentors for young males in schools was discussed as well as the frameworks guiding this study.

Chapter II discussed literature that frames the study including school-based agriculture programs, teacher shortage, factors that influence individuals' decision to teach as well as male's role in education.

Chapter III focused on the methodology of the study. The purpose of the study, research questions, descriptions of the population and instrument, data collection procedures, risks, and data analysis were discussed.

Chapter IV will focus on the purpose of the study, research questions, and findings of the study.

Purpose of the Study

The purpose of the study is to determine the factors that affect males' choice to teach agricultural education. Research questions focus on understanding the demographics of males who choose to teach agricultural education, the factors that affect males' decision to teach agricultural education, and the relationships between factors that affect males' decision to teach.

Research Questions

The following questions were developed to guide the research of this study:

1. What are the demographics of males choosing to major in agricultural education?

2. What factors affect males' pursuing an agriculture education degree and becoming a secondary school agriculture teacher?
3. Are there relationships between attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession of males pursuing an agriculture education degree?
4. What are the relationships of attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males and teaching and the characteristics of participants?

Findings

Research Question 1- What are the demographics of males choosing to major in agricultural education?

Research question one focuses on the demographics of males choosing to major in agricultural education. To analyze the demographics descriptive statistics were utilized including frequency and percentages to describe the nominal data. Demographics included classification in college, ethnicity, household structure, mentorship during high school, 4-H and the National FFA Organization (FFA) involvement, agricultural education enrollment, SAE participation, influential members, and descriptions of agricultural education curriculum.

The classification in college of participants is displayed in Table 4. A total of 20 (31.3%) respondents were juniors, 16 (25.0%) were seniors, 13 (20.3%) were sophomores, 11 (17.2%) were freshman, and 4 (6.3%) were graduate students.

Table 4

Classification in College of Male Agricultural Education Students (n = 64

Classification in College	*F*	%
Junior	20	31.3
Senior	16	25.0
Sophomore	13	20.3
Freshman	11	17.2
Graduate Student	4	6.3

Of the participants 57 (89.1%) were Caucasian, 4 (6.3%) were African American, 2 (3.1%) reported their ethnicity as other, and 1 (1.6%) was Native American (see Table 5).

Table 5

Ethnicity of Male Agricultural Education Students (n = 64)

Ethnicity	*f*	%
Caucasian	57	89.1
African American	4	6.3
Other	2	3.1
Native American	1	1.6
Asian	0	0
Latino or Hispanic	0	0
Native Hawaiian or Pacific Islander	0	0

The household structure of the participants as a child is reported in Table 6. Of the participants, 82. 8% (n = 53) reported having a household structure with a mother and father figure in the household, whether they were biological, adoptive, or step. 12.5 % (n = 8) reported having a household structure of a single parent, 3.1 % (n = 2) lived in a household structure with others, and 1.6% (n=1) lived in a household structure with other relatives such as grandparents, aunts/uncles, etc.

Table 6

Household Structure as a Child of Male Agricultural Education Majors (n = 64)

Household Structure	*f*	%
Mother and Father *(Biological, Adoptive, Step)*	53	82.8
Single Parent	8	12.5
Other	2	3.1
Other Relatives (*Grandparents, Aunts/Uncles)*	1	1.6

Table 7 displays who participants looked to for mentorship during their high school years. Of the respondents, 57.8% (n = 37) reported their agriculture teacher/FFA advisor, 17.2% (n = 11) reported their father, 15.6 (n = 10) reported their mother, 3.1% (n = 2) reported their coach, 3.1% (n = 2) reported their church leader/minister/pastor, and 3.1% (n = 2) reported other.

Table 7

Mentorship During High School of Male Agricultural Education Majors (n = 64)

Mentorship During High School	*f*	%
Agriculture Teacher/FFA Advisor	37	57.8
Father	11	17.2
Mother	10	15.6
Church Leader/Minister/Pastor	2	3.1
Coach	2	3.1
Other	2	3.1
Academic Teacher	0	0
4-H Leader	0	0

Of the respondents, 60.9% (39) of participants reported being a member of 4-H. Of those who reported being a member of 4-H, 74.4% (29) had a female leader and 25.6% (10) had a male leader as displayed in Table 8.

Table 8

Gender of 4-H Leader of the 4-H Participation of Male Agricultural Education Majors (n = 39)

Gender of 4-H Leader	*f*	%
Female	29	74.4
Male	10	25.6

Participants of the study were asked about their enrollment in agricultural education programs while in high school. Of the respondents, 95.3% (n = 61) reported being enrolled in a high school agriculture education program. Those respondents that reported being enrolled in a high school agriculture program were asked further questions about their agriculture programs. Of the 61 respondents who were enrolled in a high school agriculture program, 78.68 % (n = 48) had a male agriculture teacher and 77.05 % (n = 47) were enrolled in a multi-teacher department (see Table 9).

Table 9

High School Agricultural Education Enrollment of Male Agricultural Education Majors (n = 61)

Agricultural Education Enrollment	*f*	%
Male Agriculture Teacher	48	78.68
Multi-Teacher Department	47	77.05

Participants who indicated that their agricultural education program was a multi-teacher department were asked if they looked to one teacher for mentorship over the other. All the participants indicated yes and then were further asked to indicate that mentor teacher's gender. Of the 47 participants who were a part of a multi-teacher department 45.3 % (n = 29) indicated the teacher they looked to for mentorship the most was male (see Table 10).

Table 10

Gender of Agriculture Teacher Mentorship in Multi-Teacher Departments of Male Agricultural Education Majors (n = 47)

Gender of Teacher for Mentorship	*f*	%
Male	29	45.3
Female	18	28.1

When asked if participants were members of the FFA organization, 95.3% (n = 61) responded yes. Those participants who indicated that they were members of the organization were asked if any of their FFA advisors were male and 71.9 % (n = 46) indicated they had a male FFA advisor. Participants who indicated they were FFA members were further asked about their FFA involvement. The highest involvement was in career development and leadership development events (88.52 %), followed by local activities (85.89 %), leadership offices at the local level (77.05 %), awards programs such as proficiencies and agriscience fair (70.49 %), and then leadership offices at levels above the chapter level (22.95 %) as displayed in Table 11.

Table 11

FFA Involvement of Male Agricultural Education Students (n = 61)

FFA Involvement	*f*	%
Career Development/Leadership Development Events *(CDE/LDE)*	54	88.52
Local Activities	53	86.89
Leadership Office *(Local Level)*	47	77.05
Awards Programs *(Proficiencies, Agriscience Fair)*	43	70.49
Leadership Office *(Region, State, National Level)*	14	22.95

Respondents were further asked about if they participated in a supervised agricultural experience program and 93.8 % (n = 60) indicated they had one. Participants with a supervised agricultural experience program were asked to identify the type of supervised agricultural education program, 43.8 % (n = 28) had an entrepreneurship program, 34.4 % (n = 22) had a placement program, 7.8 % (n = 5) had a foundational/exploratory program, and 7.8 % (n = 5) had a research/experimentation program (see Table 12).

Table 12

Supervised Agricultural Experience of Male Agricultural Education Majors (n = 60)

Supervised Agricultural Experience Type	*f*	%
Entrepreneurship	28	43.8
Placement	22	34.4
Foundational/Exploratory	5	7.8
Research/Experimentation	5	7.8

When asked who the most influential person in their decision was to become an agricultural teacher, 75.0 % (n = 48) indicated their agriculture teacher/FFA advisor, 14.1 % (n = 9) indicated other individuals, 7.8 % (n = 5) indicated their mother, 1.6 % (n = 1) indicated their father, and 1.6 % (n = 1) indicated their friends (see Table 13).

Table 13

Most Influential Person in Decision to Teach of Male Agricultural Education Majors (n = 64)

Influential Person	*f*	%
Agriculture Teacher/FFA Advisor	48	75.0
Other	9	14.1
Mother	5	7.8
Father	1	1.6
Friends	1	1.6
4-H Leader	0	0

Table 14 displays the curriculum components of the three-circle model of agricultural education that participants are most excited to teach. The classroom/laboratory component had the highest percentage of participants excited to teach at 45.3 % (n = 29), followed by FFA with 39.1 % (n = 25), and supervised agricultural experience with 15.6 % (n = 10).

Table 14

Components of Program Excited to Teach of Male Agricultural Education Majors (n=64)

Components Excited to Teach	*f*	%
Classroom/Laboratory	29	45.3
FFA	25	39.1
Supervised Agricultural Experience (SAE)	10	15.6

Respondents were asked to identify the agricultural pathway they felt they are most suited to teach. Animal systems had the highest percentage of participants who felt suited to

teach the pathway with 37.5 % (n = 24) indicating they felt suited to teach that pathway. Power, structural and technical systems had 23.4 % (n = 15) who felt suited to teach that pathway, followed by 17.2% (n = 11) of participants selecting plant systems, 10.9 % (n = 7) selected agribusiness systems, 4.7 % (n = 3) selected environmental systems, and 6.3 % (n = 4) selected natural resource systems (see Table 15).

Table 15

Agriculture Pathways Most Suited to Teach of Male Agricultural Education Majors (n=64)

Pathway Most Suited to Teach	*f*	%
Animal Systems	24	37.5
Power, Structural, and Technical Systems	15	23.4
Plant Systems	11	17.2
Agribusiness Systems	7	10.9
Environmental Service Systems	3	4.7
Natural Resource Systems	4	6.3
Biotechnology Systems	0	0

At the end of the demographic portion of the instrument, participants were given the one open-ended question as an opportunity to provide any additional comments about their career decision. Table 16 displays the answers provided by participants verbatim.

Table 16

Additional Comments about Career Decision of Male Agricultural Education Majors (n=64)

I have a fear of not being able to support myself and whatever future family I may have living off of a teachers salary. My mother and father were both teachers, they enjoyed their jobs, however they regretted not being all in all the time with their children because of how worn out they were during there work days, and how they struggled all of our life's to make ends meet living off of a teachers salary, even both pursuing masters degrees and still struggling.
Throughout my time in college I have definitely faced many challenges that have made me question my decision to teach. Once I step foot into a classroom either for observations, to teach a lesson, or for special events, it reminds me of why I chose this field and reignites my desire for teaching.
My father was one of my agriculture teachers, he had a huge impact on my decision to become an agriculture educator. I believe we need more males in ag ed because right now it seems heavily dominated by women. Gentlemen in these classes need a male role mode in my opinion.
My father was one of my agriculture teachers, he had a huge impact on my decision to become an agriculture educator. I believe we need more males in ag ed because right now it seems heavily dominated by women. Gentlemen in these classes need a male role mode in my opinion.
I was fortunate to have two male ag teachers in highschool. One of which was my FFA advison who I still see as a great freind today. The other, who is my advisor's father, was my weilding teahcer. He taught me many valuable life lesson, both through his classes and through talking to him. Both of these men had a great impact on my life, and I chose to teach Ag in order to have the same impact on future genorations.
As a gay man, my teachers accepted my identity and provided me a safe place to learn. I wish to do the same for others.
1. I did more than just one type of SAE- I also did placement. 2. I feel comfortable to teach more than agribusiness including plant systems and power, structural and technical systems. 3. I didn't always want to be an agriculture teacher or in FFA. My mother was an ffa advisor and ag teacher and growing up, it felt like she spent more time with her students than she did with her own kids. She told me I had to try ffa for one year, I did and I competed in the freshman creed contest and fell in love with ffa. FFA became my clique and where I felt like I mattered and was more than just a number, or just a "smart kid." I was treated like an actual person. 4. My mother was one of my 4 FFA advisors in fact my uncle (my mothers half brother) and my honorary uncle were also my ag teachers/ffa advisors.
This is a field I will pursue later in life.
I would also wanted to be the first male with disability to become the first ag teacher.
My reason on why I chose to become an agricultural educator was mostly inspired by my agricultural mechanics teacher in high school who was also my youth pastor. I had grown in my relationship with the Lord and I feel as if my calling from him is teaching agriculture.
I feel called by God to teach in agriculture. That calling was placed on my life as a sophomore in high school. It took me from then until I was 21, had failed multiple classes in pursuit of another degree, and had dropped out of college to then work for a year in a career position for a poultry integrator before accepting that calling on my life. With no money and 10s of thousands of dollars of debt I moved to South Georgia and have not looked back. I don't know

if I'll retire as a teacher but it is my purpose at this stage in my life to inspire and motivate young men and women through agricultural education.
I taught elementary ag in high school.
I was encouraged to not become a teacher so I left school for three years and returned to become a vo ag teacher after I attended the NCF conference.
My ag teacher is the reason I was able to re-establish my family's ranch, and she also gave me a sense of belonging with FFA.
I don't necessarily feel like my decision to become an agricultural educator was based on me being a male but rather because I had great teachers, both inside and outside the agriculture classroom, who inspired me. However, I do hope that maybe me being a male and a teacher will hopefully show my future male students that being a teacher doesn't make you any less masculine as I feel most males don't feel that they can be "nurturing" enough to be a teacher.

Research Question 2- What factors affect males' pursuing an agricultural degree and becoming a secondary school agriculture teacher?

Descriptive statistics were utilized to analyze the interval data. Means and standard deviations along with frequencies and percentages were reported to describe the level of importance of each as perceived by the respondent.

The first section of the questionnaire asked respondents to specific their level of agreement of statements regarding attitude about teaching agricultural education (see Table 17). Students agreed with twenty-nine statements (3.50-4.49) and were unsure about seven statements (2.50-3.49). Two statements were rated as disagree (1.50-2.49), "as an agriculture teacher I will have a short working day" (M = 1.64; SD = .74), and "I chose teaching as a last-resort" (M = 1.52; SD = .64).

Table 17

Attitude of Male Agricultural Education Majors towards a Career as a Secondary School Agricultural Education Teacher (n=64)

"I want to become a secondary school agriculture teacher because…."	Definitely Disagree *f*	%	Disagree *f*	%	Not Sure *f*	%	Agree *f*	%	Definitely Agree *f*	%	*M*	SD
teaching agriculture allows me to provide a service to society.	0	0	0	0	0	0	17	26.6	47	73.4	4.73	.45
I want to help adolescents learn.	0	0	0	0	0	0	18	28.1	46	71.9	4.70	.45
a teaching qualification is recognized everywhere.	0	0	0	0	0	0	20	31.3	44	68.8	4.69	.47
teaching agriculture will enable me to 'give back' to society.	0	0	0	0	2	3.1	18	28.1	44	68.8	4.66	.54
I like teaching about agriculture.	0	0	1	1.6	1	1.6	19	29.7	43	67.2	4.63	.60
I have had good teachers as role-models.	1	1.6	1	1.6	0	0	20	31.3	42	65.6	4.58	.73
teachers make a worthwhile social contribution.	0	0	0	0	2	3.1	24	37.5	38	59.4	4.56	.56
teaching agriculture is a career suited to my abilities.	0	0	0	0	0	0	30	46.9	34	53.1	4.53	.50
teaching agriculture will allow me to have an impact on adolescents.	0	0	0	0	0	0	30	46.9	34	53.1	4.53	.50
teaching agriculture will allow me to shape adolescent values.	0	0	0	0	2	3.1	27	42.2	35	54.7	4.52	.56
teaching hours will fit with the responsibilities of having a family.	2	3.1	4	6.3	0	0	11	17.2	47	73.4	4.52	1.01

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

Table 17 *(continued)*

"I want to become a secondary school agriculture teacher because…."	Definitely Disagree *f*	%	Disagree *f*	%	Not Sure *f*	%	Agree *f*	%	Definitely Agree *f*	%	*M*	SD
I am interested in teaching secondary school agriculture.	0	0	2	3.1	4	6.3	20	31.3	38	59.4	4.47	.76
I have had positive classroom learning experiences.	0	0	2	3.1	0	0	30	46.9	32	50.0	4.44	.66
teaching is a fulfilling career.	0	0	0	0	6	9.4	26	40.6	32	50.0	4.41	.66
teaching agriculture will offer a steady career path.	0	0	0	0	6	9.4	29	45.3	29	45.3	4.36	.65
teaching agriculture will be a secure job.	0	0	0	0	6	9.4	35	54.7	23	35.9	4.27	.62
teaching will allow me to raise the ambitions of underprivileged youth.	0	0	1	1.6	5	7.8	34	53.1	24	37.5	4.27	.67
I have the qualities of a good agriculture teacher.	0	0	0	0	6	9.4	38	59.4	20	31.3	4.22	.60
school holidays will fit in with family commitments.	0	0	0	0	9	14.1	36	56.3	19	29.7	4.16	.65
people I've worked with think I should become an agriculture teacher.	0	0	1	1.6	14	21.9	27	42.2	22	34.4	4.09	.79
I want a job that involves working with adolescents.	0	0	2	3.1	10	15.6	35	54.7	17	26.6	4.05	.74
I have good teaching skills.	0	0	0	0	11	17.2	39	60.9	14	21.9	4.05	.63
teaching agriculture will allow me to work against social disadvantage.	0	0	2	3.1	11	17.2	34	53.1	17	26.6	4.03	.76

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

Table 17 *(continued)*

"I want to become a secondary school agriculture teacher because…."	Definitely Disagree *f*	%	Disagree *f*	%	Not Sure *f*	%	Agree *f*	%	Definitely Agree *f*	%	*M*	SD
I like working with adolescents.	0	0	1	1.6	10	15.6	43	67.2	10	15.6	3.97	.62
teaching will allow me to benefit the socially disadvantaged.	1	1.6	2	3.1	11	17.2	36	56.3	14	21.9	3.94	.81
my family thinks I should become an agriculture teacher.	1	1.6	8	12.5	13	20.3	22	34.4	20	31.3	3.81	1.07
my friends think I should become a secondary school agriculture teacher.	0	0	5	7.8	19	29.7	28	43.8	12	18.8	3.73	.86
I want to work in an adolescent-centered environment.	0	0	3	4.7	20	31.3	33	51.6	8	12.5	3.72	.75
teaching will provide a reliable income.	1	1.6	7	10.9	10	15.6	38	59.4	8	12.5	3.70	.89
teaching hours will fit with the responsibilities of having a family.	1	1.6	7	10.9	14	21.9	34	53.1	8	12.5	3.64	.90
a teaching job will allow me to choose where I wish to live.	0	0	10	15.6	21	32.8	24	37.5	9	14.1	3.50	.93
a teaching qualification is recognized everywhere.	1	1.6	10	15.6	19	29.7	28	43.8	6	9.4	3.44	.92
teaching agriculture will be a useful job for me to have when traveling.	0	0	15	23.4	19	29.7	22	34.4	8	12.5	3.36	.98
teaching agriculture could allow for more family time.	1	1.6	22	34.4	16	25.0	17	26.6	8	12.5	3.14	1.08
I was unsure of what career I wanted.	4	6.3	23	35.9	8	12.5	22	34.4	7	10.9	3.08	1.17

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

Table 17 *(continued)*

"I want to become a secondary school agriculture teacher because…."	Definitely Disagree *f*	%	Disagree *f*	%	Not Sure *f*	%	Agree *f*	%	Definitely Agree *f*	%	*M*	SD
I have always wanted to become an agriculture teacher.	3	4.7	28	43.8	6	9.4	18	28.1	9	14.1	3.03	1.22
agriculture teachers have lengthy holidays.	8	12.5	20	31.3	8	12.5	23	35.9	5	7.8	2.95	1.23
teaching agriculture is not my first career choice.	15	23.4	17	26.6	13	20.3	15	23.4	4	6.3	2.62	1.25
as an agriculture teacher I will have a short working day.	30	46.9	30	46.9	1	1.6	3	4.7	0	0	1.64	.74
I chose teaching as a last-resort.	35	54.7	26	40.6	2	3.1	1	1.6	0	0	1.52	.64

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

Twelve sub-constructs were from the attitude about teaching construct (see Table 18). Three sub-constructs fell into the definitely agree category (4.50-5.0) including "make a social contribution" (M = 4.65; SD = .42); "shape the future of adolescents" (M = 4.58; SD = .43); and "prior teaching and learning experiences" (M =4.51; SD = .66). Six sub-constructs were in the agree category (3.50-4.49). Those sub-constructs included "ability" (M = 4.26; SD = .46); "job security" (M = 4.11; SD = .58); "intrinsic career value" (M = 4.04; SD = .55); "enhance social equity" (M = 4.01; SD = .54); "work with adolescents" (M = 3.91; SD = .59); and "social influences" (M = 3.88; SD = .71). Three sub-constructs were in the not sure category (2.50-3.49) including "job transferability" (M = 3.43; SD = .66); "time for family" (M = 3.11; SD = .62); and fallback career (M = 2.41; SD = .75).

Table 18

Sub-constructs of Attitude About Teaching (n= 64)

Construct Item	*M*	*SD*
Make Social Contribution	4.65	.42
Shape the Future of Adolescents	4.58	.43
Prior Teaching and Learning Experiences	4.51	.66
Ability	4.26	.46
Job Security	4.11	.58
Intrinsic Career Value	4.04	.55
Enhance Social Equity	4.01	.54
Work with Adolescents	3.91	.59
Social Influences	3.88	.71
Job Transferability	3.43	.66
Time for Family	3.11	.62
Fallback Career	2.41	.75

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

The second section of the questionnaire asked respondents to specific their level of agreement of statements regarding beliefs about teaching agricultural education (see Table 19). None of the participants definitely agreed (4.50-5.00) with any of the statements. Ten statements fell into the agree category (3.50-4.49). Five statements fell into the not sure category (2.50-3.49) including “agriculture education teachers feel valued by society” (M = 2.28; SD = 1.06); “agriculture teachers feel their occupation has a high social status” (M = 3.06; SD = 1.02); “agriculture teachers earn a good salary” (M = 3.06; SD = 1.01); “teaching agriculture is a high-status occupation” (M = 2.97; SD = 1.01); and “agriculture teachers are well paid” (M = 2.89; SD = 1.10). No statements fell within the disagree (1.50-2.49) or definitely disagree (1.0-1.49) categories.

Table 19

Beliefs of Male Agricultural Education Majors towards a Career as a Secondary School Agricultural Education Teacher (n = 64)

	Definitely Disagree		Disagree		Not Sure		Agree		Definitely Agree			
"Compared with other professionals (e.g., sales persons, managers, science teachers)…."	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%	M	SD
teaching agriculture is hard work.	0	0	1	1.6	3	4.7	27	42.2	33	51.6	4.44	.66
agriculture teachers have a heavy work load.	0	0	1	1.6	3	4.7	30	46.9	30	46.9	4.39	.66
teaching agriculture is a highly skilled occupation.	0	0	2	3.1	3	4.7	34	53.1	25	39.1	4.28	.70
agriculture teachers need a high level of technical knowledge.	0	0	0	0	4	6.3	39	60.9	21	32.8	4.27	.57
agriculture teachers have high morale.	0	0	4	6.3	3	4.7	41	64.1	16	25.0	4.08	.74
teaching agriculture is emotionally demanding.	0	0	4	6.3	7	10.9	35	54.7	18	28.1	4.05	.80
agriculture teachers need highly specialized knowledge.	0	0	8	12.5	1	1.6	35	54.7	20	31.3	4.05	.92
teaching agriculture requires a high level of expert knowledge.	0	0	5	7.8	6	9.4	38	59.4	15	23.4	3.98	.81
agriculture teachers are perceived as professionals.	0	0	8	12.5	7	10.9	33	51.6	16	25.0	3.89	.93
teaching agriculture is a well-respected career.	0	0	8	12.5	9	14.1	27	42.2	20	31.3	3.92	.98
agriculture education teachers feel valued by society.	2	3.1	15	23.4	18	28.1	21	32.8	8	12.5	3.28	1.06

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

Table 19 *(continued)*

"Compared with other professionals (e.g., sales persons, managers, science teachers)…."	Definitely Disagree		Disagree		Not Sure		Agree		Definitely Agree		M	SD
	f	%	*f*	%	*f*	%	*f*	%	*f*	%		
agriculture teachers feel their occupation has a high social status.	4	6.3	14	21.9	25	39.1	16	25.0	5	7.8	3.06	1.02
agriculture teachers earn a good salary.	4	6.3	18	28.1	15	23.4	24	37.5	3	4.7	3.06	1.01
teaching agriculture is a high-status occupation.	4	6.3	17	26.6	24	37.5	15	23.4	4	6.3	2.97	1.01
agriculture teachers are well paid.	6	9.4	22	34.4	11	17.2	23	35.9	2	3.1	2.89	1.10

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

Five sub-constructs were from the belief about teaching construct (see Table 20). No sub-constructs fell into the definitely agree category (4.50-5.00). Participants tended to agree with the "high demand" (M = 4.29; SD = .52); "expert career" (M = 4.14; SD = .58); and "social status" (M = 3.59; SD = .78) sub-constructs. Participants were unsure about the "teacher morale" (M = 3.47; SD = .70) and the "salary" (M = 2.98; SD = 1.04) sub-constructs.

Table 20

Sub-constructs of Beliefs About Teaching (n = 64)

Construct Item	*M*	*SD*
High Demand	4.29	.52
Expert Career	4.14	.58
Social Status	3.59	.78
Teacher Morale	3.47	.70
Salary	2.98	1.04

Note. Mean score real limit scale is 1.00-4.9=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

The third section of the questionnaire asked respondents to specific their level of agreement of statements regarding their intentions to teach agricultural education (see Table 21). Participants did not definitely agree (4.50-5.00) with any of the statements regarding intentions to teach agricultural education. Five of the statements fell into the agree category (4.49-3.50) including "I am happy with my decision to become an agriculture teacher" (M =4.39; SD = .66); "I have carefully thought about becoming an agriculture teacher" (M =4.34; SD= .74); "I am satisfied with the choice to become an agriculture teacher" (M = 4.27; SD = .86); "Others influenced me to become an agriculture teacher" (M = 4.23; SD =.97); and "I was encouraged to pursue careers other than teaching agriculture" (M = 3.73; SD = 1.14). Respondents were not sure (3.49-2.50) about the statement "Others have told me that teaching agriculture was not a good career" (M = 3.17; SD = 1.36).

Table 21

Intentions of Male Agricultural Education Majors towards a Career as a Secondary School Agricultural Education Teacher (n = 64)

"I want to become a secondary school Agriculture teacher because.."	Definitely Disagree		Disagree		Not Sure		Agree		Definitely Agree		*M*	SD
	f	%	*f*	%	*f*	%	*f*	%	*f*	%		
I am happy with my decision to become an agriculture teacher.	0	0	0	0	6	9.4	27	42.2	31	48.4	4.39	.66
I have carefully thought about becoming an agriculture teacher.	1	1.6	1	1.6	1	1.6	33	51.6	28	43.8	4.34	.74
I am satisfied with the choice to become an agriculture teacher.	0	0	3	4.7	8	12.5	22	34.4	31	48.4	4.27	.86
Others influenced me to become an agriculture teacher.	2	3.1	3	4.7	3	4.7	26	40.6	30	46.9	4.23	.97
I was encouraged to pursue careers other than teaching agriculture.	2	3.1	12	18.8	4	6.3	29	45.3	17	26.6	3.73	1.14
Others have told me that teaching agriculture was not a good career.	8	12.5	19	29.7	3	4.7	22	34.4	12	18.8	3.17	1.36

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

Table 22 displays the two sub-constructs from the belief about teaching construct. Respondents tended to agree (3.50-4.49) with both sub-constructs "satisfaction with choice" (M = 4.33; SD = .60) and "social dissuasion" (M = 3.71; SD = 3.71; SD =.73).

Table 22

Intent to Teach Sub-Constructs (n = 64)

Construct Item	*M*	*SD*
Satisfaction with Choice	4.33	.60
Social Dissuasion	3.71	.73

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

The fourth section of the questionnaire asked respondents to specific their level of agreement of statements regarding males and teaching (see Table 23). Respondents tended to definitely agree (4.50-5.00) with two statements including, "teaching agriculture will allow me to serve as a role model for young males" (M = 4.55; SD = .50) and "young males need more male role models in the school environment" (M = 4.52; SD = .64). Eight statements fell within the agree category (3.50-4.49). Respondents were not sure (2.50-3.49) about five statements including, "other males do not choose teaching as a career because they perceive it as 'women's work'" (M = 3.33; SD = 1.13); "other males do not choose teaching as a career for a fear of being seen as 'less masculine'" (M = 3.28; SD = .97); "Teaching agriculture as a subject area has less fear for working with adolescents than other subject areas" (M = 3.25; SD = 1.05); "teaching agriculture is more masculine than teaching other subject areas" (M = 3.19; SD = 1.11); and "young males have adequate male role models in the school environment" (M = 2.53; SD = 1.11). None of the participants tended to disagree (1.50-2.49) or definitely disagreed (1.00-1.49) with any of the statements regarding males in teaching.

Table 23

Males and Teaching of Male Agricultural Education Majors (n = 64)

	Definitely Disagree		Disagree		Not Sure		Agree		Definitely Agree			
	f	%	*f*	%	*f*	%	*f*	%	*f*	%	*M*	SD
Teaching agriculture will allow me to serve as a role model for young males.	0	0	0	0	0	0	29	45.3	35	54.7	4.55	.50
Young males need more male role models in the school environment.	0	0	0	0	5	7.8	21	32.8	38	59.4	4.52	.64
Having more male agriculture teachers will increase young males' decision to become agriculture teachers.	0	0	0	0	11	17.2	32	50.0	21	32.8	4.16	.70
Other males perceive teaching has a lower salary than other industry/professions.	1	1.6	3	4.7	4	6.3	34	53.1	22	34.4	4.14	.85
Teaching agriculture enables me to provide more learning opportunities that are suited for the way young males learn.	0	0	4	6.3	7	10.9	35	54.7	18	28.1	4.05	.81
Having more male agriculture teachers will motivate male students.	0	0	4	6.3	13	20.3	28	43.8	19	29.7	3.97	.87
As a male, I feel that I am responsible for providing the primary income for my family.	2	3.1	9	14.1	4	6.3	27	42.2	22	34.4	3.91	1.12
Teaching agriculture will enable me to provide suitable income for my family.	2	3.1	2	3.1	16	25.0	36	56.3	8	12.5	3.72	.85
Other males do not choose teaching as a career for fear of with working with adolescents.	0	0	7	10.9	16	25.0	30	46.9	11	17.2	3.70	.89

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

Table 23 (continued)

	Definitely Disagree		Disagree		Not Sure		Agree		Definitely Agree			
	f	%	*f*	%	*f*	%	*f*	%	*f*	%	*M*	SD
Working with adolescents is more risky for male teachers than female teachers.	3	4.7	16	25.0	8	12.5	20	3.1	17	26.6	3.50	1.26
Other males do not choose teaching as a career because they perceive it as 'women's work'.	4	6.3	14	21.9	10	15.6	29	45.3	7	10.9	3.33	1.13
Other males do not choose teaching as a career for a fear of being seen as 'less masculine'.	0	0	18	28.1	15	23.4	26	40.6	5	7.8	3.28	.97
Teaching agriculture as a subject area has less fear for working with adolescents than other subject areas.	1	1.6	19	29.7	14	21.9	23	35.9	7	10.9	3.25	1.05
Teaching agriculture is more masculine than teaching other subject areas.	4	6.3	17	26.6	11	17.2	27	42.2	5	7.8	3.19	1.11
Young males have adequate male role models in the school environment.	8	12.5	32	50.0	11	17.2	8	12.5	5	7.8	2.53	1.11

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

Four sub-constructs were identified from the males and teaching construct (see Table 24). None of the sub-constructs regarding males in teaching fell into the definitely agree category (4.5-5.0). Three of the sub-constructs were within the agree category (3.50-4.49) including "male mental mindset" (M = 4.06; SD = .59); "salary" (M = 3.92; SD = .56); and "male role models" (M = 3.87; SD = .47). Two sub-constructs "working with adolescents" (M = 3.48; SD = .69) and "social status" (M = 3.27; SD = .82) were within the not sure category (2.50-2.49). None of the sub-constructs were within the disagree (1.50-2.49) or definitely disagree (1.00-1.49) categories.

Table 24

Sub-constructs of Males and Teaching (n = 64)

Construct Item	*M*	*SD*
Male Mental Mindset	4.06	.59
Salary	3.92	.56
Male Role Models	3.87	.47
Working with Adolescents	3.48	.69
Social Status	3.27	.82

Note. Mean score real limit scale is 1.00-1.49=Definitely Disagree; 1.50-2.49=Disagree; 2.50-3.49=Not Sure; 3.50-4.49=Agree; 4.50-5.00=Definitely Agree

Research Question 3- Are there relationships between attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession of males pursuing an agriculture education degree?

Correlations were utilized to analyze the relationships between attitudes toward becoming an agriculture teacher, beliefs about teaching, decisions to become a teacher, and influencers on the decision to teach of males pursing an agriculture education degree (see Table 25). Pearson's Product Moment and point biserial correlation were used to represent the correlation coefficient, represented by the term *r*, reported in both magnitude and direction. The magnitude of the correlations was determined using Davis' (1971) defined correlations.

A substantial relationship between attitude and belief (*r = .55)* reported. The relationship between attitude and intent was moderate (*r* =.32) and the relationship between attitude and males was low (*r* = .24). A moderate relationship between belief and intent (*r* = .33) as well as between belief and males (*r* = .35) was reported. The relationship between males and intent was reported low (*r* = .18).

Table 25

Correlations Between Constructs (n = 64)

Construct	Attitude	Belief	Decision	Males
Attitude	----------	.55*	.32*	.24
Belief		----------	.33*	.35*
Decision			----------	.18
Males				----------

*Note. *p < .05*

Research Question 4- What are the relationships of attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males and teaching and the characteristics of participants?

Relationships between the constructs of attitudes, beliefs, intent to teach, and males and teaching and the characteristics of participants were calculated using Person's Product Moment and point biserial correlations and are represented by the term *r* and reported in both magnitude and direction.

Relationships between attitude toward becoming a secondary school agriculture teacher and characteristics of participants are displayed in Table 26. Negligible relationships were reported between six characteristics including 4-H membership (*r* = .07), having a male ag

teacher (r = -.08), influence to become an ag teacher (r = -.03), the component of the three-circle model most excited to teach (r = -.06), FFA leadership above the local level (r = .06), and FFA participation in award programs (r = .04). Five characteristics reported low relationships with attitudes toward becoming a secondary school agriculture teacher including classification in college (r = -.15), household structure growing up (r = .15), pathway most suited to teach (r = .10), participation in CDE/LDEs (r = .23), and FFA participation in local activities (r = .24). FFA membership (r = -.30) and FFA leadership at the local level (r = .33) both reported moderate relationships.

Table 26

Correlations Between Attitudes Toward Becoming a Secondary School Agriculture Teacher and Characteristics of Participants (n = 64)

Characteristics	*r*	Magnitude
Classification	-.15	Low
Household Structure	.15	Low
4-H Membership	.07	Negligible
Male Ag Teacher	-.08	Negligible
FFA Membership	-.30*	Moderate
Influence to Become an Ag Teacher	-.03	Negligible
3 Circle Model Component Excited to Teach	-.06	Negligible
Pathway Most Suited to Teach	.10	Low
FFA Leadership at the Local Level	.33*	Moderate
FFA Leadership Above Local Level	.06	Negligible
Participation in CDE/LDEs	.23	Low
FFA Participation in Local Activities	.24	Low
FFA Participation in Award Programs	.04	Negligible

*Note. *p < .05*

Table 27 displays the relationships between beliefs about teaching and characteristics of participants. Four characteristics reported low relationships with beliefs about teaching including 4-H membership (r = .16), FFA leadership above the local level (r = -.18), FFA participation in

local activities (*r* = -.13), and FFA participation in award programs (*r* = -.19). All other characteristics reported a negligible relationship.

Table 27

Correlations Between Beliefs About Teaching and Characteristics of Participants (n = 64)

Characteristics	*r*	Magnitude
Classification	-.08	Negligible
Household Structure	.09	Negligible
4-H Membership	.16	Low
Male Ag Teacher	-.06	Negligible
FFA Membership	-.06	Negligible
Influence to Become an Ag Teacher	-.06	Negligible
3 Circle Model Component Excited to Teach	.09	Negligible
Pathway Most Suited to Teach	.09	Negligible
FFA Leadership at the Local Level	-.09	Negligible
FFA Leadership Above Local Level	-.18	Low
Participation in CDE/LDEs	-.04	Negligible
FFA Participation in Local Activities	-.13	Low
FFA Participation in Award Programs	-.19	Low

4-H membership (*r* = .18), pathway most suited to teach (*r* = -13), FFA leadership above the local level (*r* = .16), and participation in CDE/LDEs (*r* = -.16) reported low relationships with individuals' intent to teach. The remaining characteristics reported negligible relationships with individuals' intent to teach as shown in Table 28.

Table 28

Correlations Between Intent to Teach and Characteristics of Participants (n = 64)

Characteristics	*r*	Magnitude
Classification	.05	Negligible
Household Structure	.01	Negligible
4-H Membership	.18	Low
Male Ag Teacher	-.05	Negligible
FFA Membership	-.01	Negligible
Influence to Become an Ag Teacher	.06	Negligible
3 Circle Model Component Excited to Teach	.09	Negligible
Pathway Most Suited to Teach	-.13	Low
FFA Leadership at the Local Level	.03	Negligible
FFA Leadership Above Local Level	.16	Low
Participation in CDE/LDEs	-.16	Low
FFA Participation in Local Activities	-.09	Negligible
FFA Participation in Award Programs	-.07	Negligible

Relationships between the males and teaching construct and characteristics of participants are shown in Table 29. Low relationships were reported between eight characteristics of participants and the males and teaching construct including household structure (r = .10), 4-H membership (r = .15), FFA members (r = -.25), influencers to become an ag teacher (r = .20), pathway most suited to teach (r = -.18), FFA leadership at the local level (r = .18), participation in CDE/LDEs (r = .25), and FFA participation in local activities (r = .14). The remaining five characteristics showed negligible relationships between the construct males and teaching and participants.

Table 29

Correlations Between Males and Teaching and Characteristics of Participants (n = 64)

Characteristics	*r*	Magnitude
Classification	-.02	Negligible
Household Structure	.10	Low
4-H Membership	.15	Low
Male Ag Teacher	.04	Negligible
FFA Membership	-.25*	Low
Influence to Become an Ag Teacher	.20	Low
3 Circle Model Component Excited to Teach	.07	Negligible
Pathway Most Suited to Teach	-.18	Low
FFA Leadership at the Local Level	.18	Low
FFA Leadership Above Local Level	-.06	Negligible
Participation in CDE/LDEs	.25*	Low
FFA Participation in Local Activities	.14	Low
FFA Participation in Award Programs	.05	Negligible

*Note. *p < .05*

Summary

This chapter discussed the findings of the study by illustrating the statistical analysis. The research questions guiding this study were: (1) What are the demographics of males choosing to major in agricultural education?; (2) What factors affect males' pursuing an agricultural degree and becoming an agriculture teacher?; (3) Are there relationships between attitudes toward becoming an secondar agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession of males pursuing an agriculture education degree?; (4) What are the relationships of attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males and teaching and the characteristics of participants?

Descriptive characteristics including frequencies, percentage, means, and standard deviations were reported to address research questions one and two. Research questions three and four were addressed using correlations through Pearsons Product Moment reported by *r* both with magnitude and direction.

Findings that were presented in this chapter will be further discussed in the following chapter. Chapter V will provide information regarding conclusions, discussions, significance, and limitations of the study.

CHAPTER V:

CONCLUSIONS AND DISCUSSION

Chapter I focused on describing the need to determine factors that affect males' decision to become secondary school agricultural education teachers. The frameworks guiding the research were discussed including the FIT-Choice Framework and the Ag-Ed Fit Choice Framework. The significance of male role models for young male students was discussed.

Chapter II reviewed literature regarding school-based agriculture programs, teacher shortages, the factors which influence decisions to enter the teaching profession, and the status of male's role in education. A look into the male mental mindset and current school structure was also presented.

Chapter III focused on the methodology of the study. The research design, population and sample, instrumentation and data collection procedures, and data analysis techniques were discussed.

Chapter IV presented the findings obtained in the study. The results addressed the research questions guiding this study. Results were reported regarding the demographics of the participants, factors affecting males' pursing an agriculture education degree, and relationships regarding the participants attitudes, beliefs, and decisions to become secondary school agriculture teachers.

Chapter V will present a summary and conclusions based on the findings of the study. Implications of the study for agricultural education and the P-20 environment will be discussed. Finally, recommendations for future research will be presented.

Purpose of the Study

This study focused on determining factors that affect males' choice to become secondary school agriculture teachers. Research questions guiding the study sought to understand the demographics of males choosing to teach secondary school agricultural education, males' attitudes, beliefs, and decisions to teach secondary school agriculture education as well as examining relations between factors affecting males' decision to teach.

Research Questions

The following questions were developed to guide the research of this study:

1. What are the demographics of males choosing to major in agricultural education?
2. What factors affect males' pursuing an agriculture education degree and becoming a secondary school agriculture teacher?
3. Are there relationships between attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession of males pursuing an agriculture education degree?
4. What are the relationships of attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males and teaching and the characteristics of participants?

Research Design

This study utilized quantitative research methods. Specifically, a descriptive-correlational research design was selected as a form of non-experimental research. An adapted version of the Ag Ef FIT- Choice instrument was utilized to survey the population as questionnaires are often used to collect information from groups of individuals in descriptive-correlational research (Ary et al., 2002).

Population

Male agricultural education students enrolled in teacher preparation programs served as the target population for this study. Through the National Association of Agricultural Educators website (naae.org) institutions offering agricultural education programs were identified. This study utilized a convenience sample. Eight institutions in the Southeastern United States were utilized in this study.

Instrumentation

This study utilized an adapted version of the Ag Ed FIT-Choice instrument. The Ag Ed FIT-Choice Instrument developed by Lawver (2009) by adapting the original FIT-Choice Scale developed by Watt and Richardson (2007). Watt and Richardson (2007) developed the FIT-Choice Scale to measure beliefs, attitudes, and intentions of teacher candidates. Lawver (2009) adapted the FIT-Choice Scale by adding the term "agriculture" to the statements in the questionnaire to make the instrument focused on agriculture education. Additionally, the response choices were modified to reduce response choices from a seven-point Likert scale to a five-point Likert scale. Adaptations to Lawver's Ag Ed FIT-Choice Instrument for this study included the addition of a fourth section to evaluate the rale of males in the education field. Additionally, the demographic section was modified to include information regarding classification in school, household structure growing up, gender and make-up of school-based agriculture program teachers/FFA advisors and 4-H leaders, mentorships, level of participation in the National FFA Organization (FFA), supervised agricultural experience (SAE) involvement, and desire within the agricultural education curriculum.

Validity of Ag Ed Fit-Choice Instrument

Lawver (2009) determined validity of the Ag Ed FIT-Choice instrument through a seven-member panel of experts. The panel of experts, composed of university faculty, reviewed the instrument for face and construct validity.

The validity of the adaptations made to the instrument for this study including the addition of the fourth section regarding males in the teaching profession as well as modifications made to the demographic section were reviewed by the dissertation committee.

Reliability of Ag Ed FIT-Choice Instrument

The reliability of Lawver's Ag Ed FIT-Choice instrument was tested through a pilot test with freshmen agricultural education students at the University of Missouri (n = 29). Lawver (2009) reported Cronbach's alpha of .91 for attitude and .71 for beliefs.

The reliability of the adapted Ag Ed-FIT Choice instrument utilized in this study was determined through a pilot study (n = 26) of male agricultural education students enrolled at the Ohio State University, the Pennsylvania State University, and the University of Nebraska-Lincoln. The resulting Cronbach's alpha was .71 for the section measuring attitude, .79 for beliefs about teaching, .44 for the decision to teach, and .64 for the male's role in education.

Data Collection

A modified version of Dillman's Tailored Design Method was used in this study. The modifications included limiting the contacts to three contacts including a pre-notice letter, emailed instrument, and a thank you/reminder email.

Faculty members at Abraham Baldwin Agricultural College, University of Georgia, Mississippi State University, University of Mt. Olive, North Carolina State University, University of Tennessee, Murray State University, and West Virginia University were invited to participate in the study.

After agreeing to participate in the study a pre-notice letter was emailed to faculty members at each participating university with an introduction statement and a link to the electronic instrument. Participating faculty members distributed the link to the male students enrolled in their agricultural education programs. A third contact was made via email as a reminder to have students participate and a thank you for participating in the study. Results include a response rate of 60% (n = 64).

Data Analysis

Data were analyzed using SPSS for Windows XP software. Descriptive statistics including frequency and percentages were utilized to address research question one regarding demographics of males choosing to major in agricultural education. Descriptive statistics including frequencies, percentages, means, and standard deviations were utilized to address research question 2 regarding the factors affecting males in pursing an agricultural degree and becoming a secondary school agriculture teacher. Research questions three and four were analyzed using correlations to look at the relationships. Pearson's Product Moment and point biserial correlations were utilized and reported.

Limitations of Study

This study was limited to agricultural education students enrolled in one of the agricultural education program eight agricultural education programs at Abraham Baldwin

Agricultural College, University of Georgia, Mississippi State University, University of Mt. Olive, North Carolina State University, University of Tennessee, Murray State University, and West Virginia University during the 2023 fall semester.

Summary of the Findings

Research Question 1- What are the demographics of males choosing to major in agricultural education?

Most of the participants in this study were juniors (31.3%), followed by seniors (25.0%), sophomores (20.3%), freshman (17.2%), and graduate students (6.3%). The majority of participants were Caucasian (89.1%). The next largest group of participants were African American (6.3%), followed by Other (3.1%) and Native American (1.6%). The majority of participants (82. 8%) reported having a household structure with a mother and father figure in the household, whether they were biological, adoptive, or step. The next largest household structure reported was growing up with a single parent (12.5 %), followed by living in a household structure with others (3.1 %), and living in a household structure with other relatives such as grandparents and/or aunts/uncles (1.6%).

Over half of the respondents (57.8%) reported they looked to their agriculture teacher/FFA advisor for mentorships during high school. The next largest group reported looking to their father for mentorship (17.2%) followed by their mother (15.6 %), their coach (3.1%), their church leader/minister/paster (3.1%), and other (3.1%).

The majority of respondents (60.9%) reported being a member of 4-H and of those who reported being a member of 4-H, a majority were led by a female (74.4%) 4-H leader. A large percentage of participants were enrolled in agricultural education programs while in high school

(95.3%). Over three-fourths (78.68%) of those enrolled in a high school agricultural education program reported having a male agriculture teacher. Of the students enrolled in an agricultural education program the majority (77.05 %) were enrolled in a multi-teacher department. The majority of participants (45.3%) enrolled in a multi-teacher department reported the gender of the agriculture teacher they looked to for mentorship over the other as male.

The majority of participants (95.3%) reported being a member of FFA and of those in FFA the majority (78.68 %) reported having a male FFA advisor. Participants who indicated they were FFA members were further asked about their FFA involvement. The highest involvement was in career development and leadership development events (88.52 %), followed by local activities (85.89 %), leadership offices at the local level (77.05 %), awards programs such as proficiencies and agriscience fair (70.49 %), and then leadership offices at levels above the chapter level (22.95 %).

The majority of respondents (93.8%) reported having a supervised agricultural experience program. The majority of those who reported having a supervised agricultural experience program (43.8 %) had an entrepreneurship program. Placement supervised agricultural education programs were the next largest group (34.4 %), followed by foundational/exploratory program (7.8%), and research/experimentation program (7.8 %).

The majority of participants (75.0 %) indicated their agriculture teacher/FFA advisor as the most influential person in their decision to become a secondary school agriculture teacher. Followed by other individuals (14.1 %), their mother (7.8 %), their father (1.6 %), and their friends (1.6 %).

Almost half of the participants (45.3%) reported being excited to teach the classroom/laboratory component of the three-circle model with the supervised agricultural being the lowest (15.6%) excitement to teach. The top-three pathways reported most suited to teach by respondents included animal systems (37.5%), power, structural and technical systems (23.4 %) and plant systems (17.2%).

At the end of the demographic portion of the instrument, participants were given the one open-ended question as an opportunity to provide any additional comments about their career decision. Themes found in the open-ended responses included the desire to serve as a role model for younger males, a developed passion or calling for teaching and working with youth and having being in FFA and an agriculture program created a sense of belonging for them.

Research Question 2- What factors affect males' pursuing an agricultural degree and becoming a secondary school agriculture teacher?

Attitude. Participants agreed with twenty-nine statements (3.50-4.49) and were unsure about seven statements (2.50-3.49) regarding their attitude toward teaching agricultural education. Two statements were rated as disagree (1.50-2.49), "as an agriculture teacher I will have a short working day" and "I chose teaching as a last resort". Participants definitely agreed (4.50-5.0) with three sub-constructs regarding attitude toward teaching secondary school agriculture education, including "make a social contribution"; "shape the future of adolescents"; and "prior teaching and learning experiences". Participants agreed (3.50-4.49) with six sub-constructs, including "ability"; "job security"; "intrinsic career value"; "enhance social equity"; "work with adolescents" ; and "social influences". Participants were not sure (2.50-3.49) about three sub-constructs including "job transferability"; "time for family"; and "fallback career".

Belief. Participants agreed (3.50-4.49) with ten statements regarding belief. Participants were not sure category (2.50-3.49) about five statements including “agriculture education teachers feel valued by society”; “agriculture teachers feel their occupation has a high social status”; “agriculture teachers earn a good salary”; “teaching agriculture is a high-status occupation”; and “agriculture teachers are well paid”. Participants tended to agree (3.50-4.49) with the “high demand”; “expert career”; and “social status” sub-constructs of belief. Participants were not sure (2.50-3.49) about the “teacher morale” and the “salary” sub-constructs.

Intention to Teach. Participants agreed (4.49-3.50) with five statements including “I am happy with my decision to become an agriculture teacher” ; “I have carefully thought about becoming an agriculture teacher” ; “I am satisfied with the choice to become an agriculture teacher”; “Others influenced me to become an agriculture teacher”; and “I was encouraged to pursue careers other than teaching agriculture”. Respondents were not sure (3.49-2.50) about the statement “Others have told me that teaching agriculture was not a good career”. Respondents agreed (3.50-4.49) with both sub-constructs “satisfaction with choice” and “social dissuasion”.

Males in the Teaching Profession. Respondents definitely agreed (4.50-5.00) with two statements including, “teaching agriculture will allow me to serve as a role model for young males” and “young males need more male role models in the school environment”. Participants agreed (3.50-4.49) with eight statements. Respondents were not sure (2.50-3.49) about five statements including, “other males do not choose teaching as a career because they perceive it as ‘women’s work’”; “other males do not choose teaching as a career for a fear of being seen as ‘less masculine’”; “Teaching agriculture as a subject area has less fear for working with adolescents than other subject areas”; “teaching agriculture is more masculine than teaching

other subject areas" ; and "young males have adequate male role models in the school environment". Participants agreed (3.50-4.49) with three sub-constructs including "male mental mindset"; "salary"; and "male role models". Participants were not sure (2.50-2.49) with two sub-constructs including "working with adolescents" and "social status".

Research Question 3- Are there relationships between attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession of males pursuing an agriculture education degree?

Pearson's Product Moment and point biserial correlation were utilized to determine the relationships. A substantial relationship between attitude and belief was reported. A moderate relationship between attitude and intent was found. A low relationship between attitude and males was reported. A moderate relationship between belief and intent as well as between belief and males was reported. The relationship between males and intent was reported as low.

Research Question 4- What are the relationships of attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males and teaching and the characteristics of participants?

Relationships between the constructs of attitudes, beliefs, intent to teach, and males and teaching and the characteristics of participants were calculated using Person's Product Moment and point biserial correlations.

Attitude. Negligible relationships were reported between six characteristics including 4-H membership, having a male ag teacher, influence to become an ag teacher, the component of the three-circle model most excited to teach, FFA leadership above the local level, and FFA participation in award programs and attitudes toward teaching. Five characteristics reported low

relationships with attitudes toward becoming a secondary school agriculture teacher including classification in college, household structure growing up, pathway most suited to teach, participation in CDE/LDEs, and FFA participation in local activities. FFA membership and FFA leadership at the local level both reported moderate relationships.

Belief. Four characteristics reported low relationships with beliefs about teaching including 4-H membership, FFA leadership above the local level, FFA participation in local activities, and FFA participation in award programs.

Intent to Teach. Low relationships were found between 4-H membership, pathway most suited to teach, FFA leadership above the local level, and participation in CDE/LDEs and individuals' intent to teach.

Males in the Teaching Profession. Low relationships were found between eight characteristics of participants and the males and teaching construct including household structure, 4-H membership, FFA members, influencers to become an ag teacher, pathway most suited to teach, FFA leadership at the local level, participation in CDE/LDEs, and FFA participation in local activities.

P-20 Relevance

P-20 education is a continuum of education focused on developing individuals across the spectrum of education from pre-school through post-secondary intuitions and careers. The findings of this study provide implications for leadership, diversity, innovation, and implementation for agriculture educators at the secondary and post-secondary levels.

According to the National Association of Agricultural Educators (2020), current data shows that 75% of new agricultural education graduates are female. With such a high percentage

of graduates leaving agricultural education preparation programs, a gender division in the agriculture teacher profession is becoming prevalent. This gender division impacts directly affect students in school-based agriculture education programs due to the lack of male agriculture teachers entering the profession. Gurian and Stevens (2005) report that over half of the young men in school today are being raised without some type of male mentoring thus impacting young men in schools facing under motivation and low-grade learning.

The findings of this research indicate males tend to agree that young males need more male role models in schools. Additionally. McKim et al. (2018) reports 60.9% of students enrolled in school-based agriculture education programs are male. McKim et al. (2018) also reports the second largest ethnicity in school-based agriculture education were Hispanic (13.89%). Yet, there were zero male Hispanic students in the agricultural education programs utilized in this sample. Therefore, to provide diversity in the teacher profession and support for young male students' teacher educators in institutions with agricultural education programs need to focus recruitment efforts on males into the agricultural education programs. There also needs to be a focus on recruiting more Hispanic males into these programs.

This study also provides implications at the secondary level in school-based agriculture education. Findings of this study also indicate that males look to their agriculture teacher as the primary influencer in becoming an agriculture teacher. Therefore, secondary school agriculture teachers should focus efforts on promoting the agriculture teaching profession to current males in their agricultural education programs. According to the findings, secondary school agriculture teachers can do this through providing positive teaching and learning experiences for males and supporting their perceived ability to teach. Additionally, current school-based agriculture teachers should highlight the intrinsic, personal, and social values related to teaching agriculture

education along with the task demand and task return of teaching. Further conclusions, discussions, and implications for current practitioners and research are discussed in detail in the following sections.

Conclusions

The following conclusions of this descriptive-correlational research are presented below.

1. Participants in this study were primarily Caucasian (89.1%), juniors in college (31.3%), and grew up in a household structure that contained a mother and father figure (82.8%).
2. Participants in this study were enrolled in a secondary school agricultural education program and members of FFA (95.3%), most active in career development events (88.52%), and had a supervised agricultural experience program (93.8%).
3. Over three-fourths of participants enrolled in an agricultural education program had a male agriculture teacher/FFA advisor (78.68 %).
4. Participants in this study primarily indicated that they looked to their agriculture teacher/FFA advisor for mentorship (57.8%) and Agriculture teachers (75.5%) were the most influential people in participants' decision to teach secondary school agricultural education.
5. Participants are most excited to teach the classroom/laboratory component (45.3%) of the three-circle model of agricultural education and are most suited to teach animal systems curriculum (37.5%).
6. Participants definitely agreed with three sub-constructs regarding attitude toward teaching secondary school agricultural education including, "make a social contribution"; "shape the future of adolescents", and "prior teaching and learning experiences."
7. Participants agree with three sub-constructs regarding belief about teaching including "high demand"; "expert career", and "social status".

8. Participants agreed with both sub-constructs “satisfaction with choice” and “social dissuasion” regarding their intention to teach secondary school agricultural education.
9. Participants agreed with three sub-constructs regarding males in the teaching profession including “male mental mindset”; “salary”; and “male role models”.
10. Attitudes toward becoming a secondary school agriculture teacher and beliefs about teaching reported a substantial relationship.
11. Beliefs about teaching and decisions to become an agriculture teacher as well as beliefs about teaching and males in the teaching profession reported being moderately related.
12. A moderate relationship was reported between FFA membership and attitude toward becoming a secondary school agriculture teacher as well as between FFA leadership at the local level and attitude toward becoming a secondary school agriculture teacher.

Discussions and Implications

Research Question 1- What are the demographics of males choosing to major in agricultural education?

Conclusion: Participants in this study were primarily Caucasian (89.1%), juniors in college (31.3%), and grew up in a household structure that contained a mother and father figure (82.8%).

Discussion. The finding that most participants were Caucasian is not surprising. McKim et al. (2018) reported 70.83% of students enrolled in a school based agricultural education program are Caucasian and the results of this study showed that 93.8% of the participants were enrolled in a school based agricultural education program in high school. It is also not surprising that the majority of participants were juniors. Several of the institutions participating in the study

are large institutions in which many students transfer from a state or community college their junior year, thus many of these programs do not see their agricultural education majors until they are juniors.

The finding that the majority of students grew up in a household structure that contained a mother, and a father figure was also not surprising. Literature showed that one in three children live in single parent homes (Edgar et al., 2016; Johnson, 2008). While living in a single parent home was the next highest percentage, it would be expected that the percentage of those growing up in a household with a mother and father figure would be slightly lower to fit the percentages shown in the literature.

Implications. The finding that such a significant percentage of participants were Caucasian with the second largest being African American falls in line with current enrollment of school-based agricultural education students. However, McKim et al. (2018) reports that 13.89% of students enrolled in school based agricultural education programs are Hispanic. A percentage larger than African American, the second high group of participants in the study. Yet, this study reported 0% participants being of the Hispanic ethnicity. This poses the question, where are the Hispanic males? Why are they not choosing to major in agricultural education?

Phipps et al. (2008) discussed the responsibility of agriculture teachers in guiding and mentoring students in career decisions. The results of this study support that statement as further conclusions demonstrate that agriculture teachers were the most influential in participants decision to teach. Therefore, how can current agricultural education teachers promote agricultural education as a profession to male Hispanic students?

Over 82% of participants coming from a household structure with a mother and father figure is almost double, what would be expected to see as reported in the literature. This poses the question, do males raised in a single parent family have different life experiences that prevent them from becoming agricultural education majors? The results of this study demonstrate that over 95% of participants were active in FFA. Additionally, themes seen in the open-ended question demonstrate that being in FFA helped students to find their place and develop a passion for FFA and agriculture. This information lends to the question, do males raised in single parent families participate in FFA and foster that passion to teach? Is being in a single parent family lend for the males to work to earn income for their families, thus limiting their involvement in FFA?

Conclusion: Participants in this study were enrolled in a secondary school agricultural education program and members of FFA (95.3%), most active in career development events (88.52%), and had a supervised agricultural experience program (93.8%).

Discussion. The finding that 95.3% of males majoring in agricultural education were in a school-based agriculture program and members of FFA follows findings from Lawver (2009) in which the majority of participants had participated in a school based agricultural education program and FFA. Being members in FFA, participating in FFA events, and having a supervised agricultural experience program is also not surprising as the three circle model of agricultural education is comprised of classroom/laboratory experience, supervised agricultural experience, and FFA (Phipps et al., 2008). Ingram et al. (2018) further supports the findings stating that experiences in agricultural education programs ignited a desire within students to stay connect to agriculture and agricultural education.

The majority of participants being enrolled in school-based agriculture education programs and FFA (95.3%), most active in career development events (88.52%), and having a supervised agricultural experience program (93.8%) is also supported by the physical make-up of the male brain and the way males learn and think. Gurian and Stevens (2005) explain that the male brain is more stimulated through spatial-mechanical stimulation and can attach learning to physical movement. The nature of school-based agricultural education programs includes hands on activities and laboratory experiences for students to develop psychomotor skills (Phipps et al, 2008). It also provides opportunities for students to apply those hands-on skills through career development events and supervised agricultural experiences. These learning methods support the way males learn. Thus, we see a larger percentage of males enrolled in school based agricultural education programs as discussed by McKim et al. (2018) as school-based agriculture education programs provides the outlets to learn the way the male brain is programed to learn and many academic courses have shifted to learn without physical movement and through verbal means (Gurian & Stevens, 2005).

Implications. The majority of the participants in this study being enrolled in school-based agriculture education programs and FFA, most active in career development events, and having a supervised agricultural experience program provides opportunities for teacher educators and secondary school-based agriculture education teachers to recruit males into the profession. Institutions offering agricultural education programs should focus their recruitment efforts of males entering their programs in secondary school based agricultural education programs and FFA.

Current school based agricultural education teachers can promote teaching to males by allowing them experience in teaching through career development events and supervised

agricultural experience programs involving teaching. Ingram et al. (2018) indicated that participating in career development events, teach ag workshops, and leadership events were motivators to pursue teaching as a career, with participating in career development events as the most powerful influencer in the decision to teach. Additionally, Gurian and Stevens (2005) discussed how the male brain learns through experience, and providing males the opportunity to experience teaching through career development events and supervised agricultural experience programs such as internships promote the way the male brain learns. Internships with teaching through supervised agricultural experience programs could also help to curb male's fear of working with children. According to the literature, one of the reasons males do not enter the teaching profession is the fear of caring for children and a fear of working with young children (Johnson, 2008; Tyree, 2008). Providing experiences through supervised agricultural experience programs can allow males the experience of working with younger children prior to entering the teaching profession.

Conclusion: Over three-fourths of participants enrolled in an agricultural education program had a male agriculture teacher/FFA advisor (78.68 %).

Discussion. The finding that over three-fourths of participants enrolled in an agricultural education program had a male agriculture teacher/FFA advisor (78.68%) is surprising. While historically, school-based agricultural education teachers have been males (Foster, 2001) literature has shown a shift to a female driven profession with 75% of new agricultural education graduates being predominately female (National Association of Agricultural Educators, 2020).

Implications. While the profession is becoming more female driven, over three-fourths of the participants in this study reported having a male agriculture teacher/FFA advisor. This lends

to the question, are male school based agricultural students more drawn to male agriculture teachers or the courses the male agriculture teachers are teaching?

Conclusion: Participants in this study primarily indicated that they looked to their agriculture teacher/FFA advisor for mentorship (57.8%) and agriculture teachers (75.5%) were the most influential people in participant's decision to teach secondary school agricultural education.

Discussion. The finding that participants look to their agriculture teacher/FFA advisor for mentorship (57.8%) and that agriculture teachers (75.5%) were the most influential people in decision to teach secondary school agricultural education is supported through previous research. Studies show agriculture teachers have been the most powerful influencer on the decision to teach due students perceiving the agriculture teacher as a role model (Thieman et al., 2016). According to Ingram et al. (2018), encouragement and mentorship from agriculture teachers were also not always related to verbal encouragement but also from watching agriculture teacher's impact on students. Park and Rudd (2005) further support the findings of mentorship stating that agriculture teacher's ability to influence career decisions are through actions and instruction. It is important to note that this finding is contrary to research reported in the literature that sates high school students indicate the mother as the most influential individual in career decisions (Thieman et al., 2016; Faulkner et al., 2009; Marx et al., 2014; Rocca & Washburn, 2005; Wahl & Blackhurst, 2000).

Implications. These findings provide implications for current secondary school agriculture teachers. Agriculture teachers need to focus on promoting teaching agriculture to male students enrolled in their programs and FFA chapters. Ingram et al. (2018) found that not only speaking positively about the profession to students but through direct encouragement of

consideration of teaching as a career, showing the joy of teaching, and through taking personal interest in students.

Conclusion: Participants are most excited to teach the classroom/laboratory component (45.3%) of the three-circle model of agricultural education and are most suited to teach animal systems curriculum (37.5%).

Discussion. Almost half of the participants (45.3%) reporting to be most excited to teach the classroom/laboratory component of the three-circle model of agricultural education falls in line with Miller's (2022) explanation of the roles of an agriculture teacher. According to Miller (2002), the majority of an agriculture teacher's time is spent on classroom and laboratory instruction. Time is spent on planning lessons, developing instructional materials, and working directly with students. Spending time in classroom/laboratory instruction also supports the way males learn through physical movement (Gurian & Stevens, 2005).

Implications. Participants reporting being most excited to teach the classroom/laboratory component of the three-circle model provides implications for teacher education and curriculum development. As males are most excited to provide classroom and laboratory instruction, teacher educators should focus on providing opportunities for male agriculture education majors to experience curriculum and laboratory experience development while enrolled in agricultural education institutions. With 37.5% of males reporting the feel most suited to teach animal systems, lends to the question if more focus needs to be provided in other curriculum areas to help male agricultural education majors prepare to teach additional curriculum pathways.

Research Question 2- What factors affect males' pursuing an agricultural degree and becoming a secondary school agriculture teacher?

Conclusion: Participants definitely agreed with three sub-constructs regarding attitude toward teaching secondary school agricultural education including, "make a social contribution"; "shape the future of adolescents", and "prior teaching and learning experiences."

Discussion. Regarding the sub-constructs relating to attitude toward teaching secondary school agricultural education, participants definitely agreed with the sub-constructs relating to social contributions, shaping the future of adolescents, and prior teaching and learning experiences. Lawver (2009) also found these sub-constructs to emerge as most important.

The sub-constructs of making social contributions and shaping the future of adolescents fall within the social utility value of the Ag Ed FIT-Choice theoretical model (Lawver, 2009). The social utility value relates to an individual's desire to make social contributions through giving back to society by becoming a teacher (Watt & Richardson, 2007). Watt and Richardson (2007) state the idea of working with children and adolescents as intrinsic and altruistic motivations and dominate the reasons men and women choose to teach in the United States. The idea of contributing to society and shaping adolescents' future also relates to Schunk's (2012) explanation of the expectancy value theory in which individuals are motivated to act when there is an attractive outcome. Additionally, Bandura (1986) states that students are more likely to choose a career that will have a positive influence on others. The idea of the social utility value of teaching, especially the influence agriculture teachers have on their students, has been found as the most influential factors amongst participants of research studies (Ingram et al., 2008; Thieman et al., 2016; Marx et al., 2017).

Yet, it is interesting to note that participants in this study definitely agreed with statements relating to shaping the future of adolescents. Johnson (2008) and Tyree (2008) both indicated

that the idea of caring for children professional through the teaching profession as becoming taboo for many men and providing challenges for men entering the teaching profession. This finding demonstrates that while there may be hesitation for men entering the teaching profession of working with children the idea of contributing to society and shaping the future of those children could outweigh those fears.

The sub-construct of prior teaching and learning experiences relates to the experiences of participants in teaching and learning ranging from Sunday school to having good teachers (Lawver, 2009). Participants in this study highly agreed with this sub-construct, in which questions related to having good teacher role models, inspirational agriculture teachers, and positive learning experiences. Lawver (2009) also found this sub-construct to be positive for the participants. Thieman et al. (2016) also found the students' perception of the agriculture teacher as a role model as a powerful influence on the decision to teach.

Implications. These findings provide implications for teacher educators and secondary school teachers. As Lawver (2009) suggests current high school teachers and teacher educators to make conscious efforts in making learning experiences positive. Providing positive learning experiences for students demonstrates the teacher influence for students. As Ingram et al. (2018) states that encouragement from teachers can stem from the experience of watching agriculture teachers impact other students creating a desire for students to have the same impact on future students, thus relating to the participants agreement of making a social contribution and shaping the lives of future students. Additionally, secondary school agriculture teachers should make efforts to focus on speaking positively about the profession and share stories of ways they have impacted other students.

Conclusion: Participants agree with three sub-constructs regarding belief about teaching including "high demand"; "expert career", and "social status".

Discussion. Participants agreed that teaching secondary school agricultural education had "high demand". The questions within this sub-construct stem around the idea of agriculture teachers having a heavy workload and teaching as emotionally demanding and hard work. This finding is not like Lawver (2009) who found participants to be not sure about this sub-construct. However, participants of this study agreed with sub-constructs regarding belief about teaching like Lawver (2009) in expert career. The sub-construct expert career focuses on questions regarding agriculture teachers as needing high levels of technical knowledge and specialized knowledge and that teaching agriculture is a high skilled occupation. These sub-constructs are within the task demand portion of the Ag Ed FIT Choice Framework (Lawver, 2009). The idea that teaching agriculture as challenging was also found by Miller (2022). The idea that teaching secondary school agriculture is highly demanding may stem from the nature of school-based agricultural education. Miller (2022) describes the three-component model of agricultural education as classroom/laboratory instruction, FFA, and supervised agricultural experience. In addition to the roles as a classroom teacher, FFA advisor, and SAE supervisor, agriculture teachers also take on other roles such as mentorship, serving the school, engaging in the community, and being engaged in professional organizations (Miller, 2022). Marx et al. (2017) found that while the combination of all the tasks of a secondary school agriculture teacher is highly demanding, the respondents found that agriculture as ever-changing and teaching would never become boring. Additionally, Lawver and Torres (2011) also found that participants valued the complexity of the skill and technology knowledge needed to be a secondary school agriculture teacher.

Participants of this study also agreed with the sub-construct of social status, like Lawver (2009). The sub-construct of social status refers to agriculture teachers being perceived as professionals, a well-respected career, and a high-status occupation. This sub-construct falls within the task return portion of the Ag Ed Fit Choice Framework (Lawver, 2009). This finding is interesting to note as Johnson (2008) discusses that males are aware of the low status of the profession compared to other professionals such as medicine or law. This stems the question if males feel this way about teaching secondary school agriculture education because of the nature of agriculture? Would males feel the same about teaching other subject areas? Marx et al. (2017) found that participants had a lack of passion for teaching subjects other than agriculture. Similar to Ingram et al. (2018) who found that respondents indicated a desire to teach due to a passion for agriculture and being an advocate for agriculture.

Implications. These findings provide implications for teacher educators and further research. Participants agreed that teaching secondary school agricultural education is both highly demanding and requires specialized knowledge. Williams (2021) found that males deterring from teaching agriculture due to FFA and extracurricular activities. Therefore, teacher educators need to ensure they are preparing students to enter the teaching profession with an understanding of how to balance the roles associated with becoming a secondary school agriculture teacher. Additionally, teacher educators need to ensure they are adequately preparing students with the specialized skills needed to teach agriculture curriculum.

Participants agreeing with teaching agriculture as a high-status occupation algins with research conduct by Lawver (2009) but does not align with literature indicating while males stray away from entering the teaching profession (Johnson, 2008). Therefore, further research should

be conducted to see if males believe teaching other subject areas other than agriculture still hold a high social status.

Conclusion: Participants agreed with both sub-constructs "satisfaction with choice" and "social dissuasion" regarding their intention to teach secondary school agricultural education.

Discussion. Participants of the study agreed with the sub-construct regarding satisfaction with choice to teach secondary school agricultural education. The sub-construct "satisfaction with choice" is the output of the Ag Ed Fit -Choice Framework (Lawver, 2009). This finding is similar to the findings of Lawver's (2009) study. The statements within this sub-construct focus on carefully thinking about becoming an agriculture teacher, being happy with the decision to teach agriculture, and being satisfied with the choice to become an agriculture teacher.

Participants overall agreed with the sub-construct "social dissuasion". This sub-construct falls within the prior teaching and learning experiences portion of the Ag Ed Fit Choice Framework (Lawver, 2009). This sub-construct focuses on other's influences on participants choice to become a teacher with statements regarding others influence to become an agriculture teacher, others telling participants that teaching is not a good career, and participants being encouraged to pursue careers other than teaching agriculture. Participants agreed with the statements regarding being influenced to teach by others and being told that teaching is not a good career, however, they were not sure about being encouraged to pursue other career opportunities. These findings are like Richardson and Watt (2006) who reported strong experiences with social dissuasion from teaching. It is important to note that while participants reported agreeing that others have told them that teaching agriculture was not a good career and

reported being unsure about being told to pursue other careers, participants still agreed with statements regarding satisfaction with the decision to become an agriculture teacher.

Implications. These findings hold implications for secondary school agriculture teachers in regard to influencing males to become agriculture teachers. Lawver (2009) reported the necessity of secondary school agriculture teachers ensuring they are not discouraging students who want to become agriculture teachers. This recommendation also holds true in these findings of this study.

Conclusion: Participants agreed with three sub-constructs regarding males in the teaching profession including "male mental mindset"; "salary"; and "male role models".

Discussion. Male respondents agreed with the sub-construct "male mental mindset". This sub-construct had questions focused on having more male agriculture teachers motivating male students, increasing males' decision to teach agriculture, and providing opportunities that are suited for the way males learn. Literature shows that shifts in education and society have left male students with labels as 'under motivated' and 'chronic underperformance' due to current curriculum (Gurian & Stevens, 2005). Gurian and Stevens (2005) state that instructional methods that have physical movement such as apprenticeships, action, and practice have been replaced with verbal means. Thus, making it harder for males to learn as the male brain is hard wired to learn, through spatial-mechanical stimulation, through diagrams, pictures, and moving objects rather than through words (Gurian & Stevens, 2005). The way males brains are programed to learn through hands-on learning and apprenticeships aligns with the nature of agricultural education. Phipps et. Al (2008) states the main purposes of agricultural education is preparing individuals for careers, entrepreneurship, and agricultural literacy through classroom/laboratory instruction, supervised agricultural experience, and FFA.

Male respondents also agreed with the sub-construct “salary” which focused on males perceiving teaching as a lower salary than other industry/professions, providing a suitable income for family, and being the primary income provider for the family. These findings are supported through literature. Johnson (2008) reported men traditionally hold views of being the primary wage earner in the family. Tyre (2008) stated that teachers are amongst the lowest paid public employees compared to other jobs in industry. Yet, research has shown teaching a steady career path with reliable income and a secure job (Lawver & Torees, 2011). Marx et al. (2017) found that noting the nationwide need for agriculture teachers provides a sense of job security.

Male respondents agreed with the sub-construct “male role models”. When asked about males in the teaching professions respondents definitely agreed with two statements including, “teaching agriculture will allow me to serve as a role model for young males” and “young males need more male role models in the school environment”. This finding is supported by literature. Johnson (2008) reports a universal trend in a decline of males in the teaching profession, with 23% of K-12 teachers in the United States being male. While the field of agricultural education has historically been male dominated, there has been a shift to a more female dominated field. The National Association of Agricultural Educators (2020) reported that 75% of new agricultural education graduates are predominately female. Gurian and Stevens (2005) explain the need for more male teachers as today over half of male students are being raised without a father in the home and lack male mentoring. This lack of male mentorship causes concern for male students facing undermotivation and low-grade learning in school (Gurian & Stevens, 2005).

Implications. Male participants reporting that males need more male role models in school and that teaching agriculture will give them the opportunity to serve as a male role model to students provides implications for teacher educators and secondary school agriculture teachers.

With the decrease of males entering the agriculture teaching profession institutions with agricultural education programs need to focus efforts on recruiting males into the teaching profession by promoting the need for more male role models in schools, promoting the career as a stable career path, and the ability to provide learning opportunities for males structured the way males learn best. Additionally, secondary school agriculture teachers should focus on recruiting males to become secondary school agriculture teachers by focusing on promoting the need for more male role models, demonstrating the career as a steady career path, and highlighting the learning opportunities for males within the classroom, FFA, and SAE experiences.

Research Question 3- Are there relationships between attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession of males pursuing an agriculture education degree?

Conclusion: Attitudes toward becoming a secondary school agriculture teacher and beliefs about teaching reported a substantial relationship.

Discussion. A substantial relationship was reported between participants' attitudes toward becoming a secondary school agriculture teacher and their beliefs about teaching. The construct relating to attitude toward teaching secondary school agriculture education includes sub-constructs regarding self-perception, intrinsic career value, personal utility value, social utility value, fallback career, and prior teaching and learning experiences. The construct of beliefs toward teaching secondary school agriculture education include sub-constructs regarding task demand and task return. Task demand relates to the idea of expert career and a high demanding career and task return relations to the ideas of social status, teacher moral, and salary.

Finding a substantial relationship between these two constructs reported from participants falls inline with the expectancy-value theory for achievement motivation. The expectancy-value theory has foundations in the idea that individuals are motivated to act when the individual views an attractive outcome combined with their belief that the outcome is attainable (Schunk, 2012). Bandura (1986) further supports this relationship indicated students are more likely to choose a career in which they believe they can be successful, have needs met, and have a positive influence on others. Thieman et al. (2016) reports the expectancy-value theory to demonstrate a relationship between students' career choice and the factors that support or deter the choice to teach.

Previous research also supports the substantial relationship reported by participants between attitude toward teaching and beliefs about teaching. Studies show that participants have intrinsic values, a passion for education, and have perceived the teaching profession as enjoyable due to passions for agriculture (Lawver & Torres, 2011; Ingram et al., 2018; Theiman et al., 2016; Marx et al. 2017). Additionally, research shows that the high task demand of teaching indicates that teaching is ever changing and will never become boring, and participants value the need for high-level specialized technical knowledge (Marx et al., 2017; Lawver & Torres, 2011). Research also indicates altruistic motivations as indicators for the choice to teach including having a positive influence on others by impacting the lives of students (Ingram et al., 2018; Thieman et al., 2016; Marx et al., 2017). Personal utility value has also been shown to influence individuals' beliefs toward teaching. Research shows that participants view teaching agriculture as a steady career path that offers job security, flexibility in teaching which offers benefit to future family, and benefits for advancement within the career field (Lawver & Torres, 2011; Marx et al. (2017); Ingram et al., 2018, Harms & Knoblock, 2005). The influence of others and

personal experiences in teaching and learning have also been discussed in previous research as indicators towards individuals' beliefs and attitudes towards teaching. Research reports that participants indicate the value of social influences in the decision to teach, perceptions of the agriculture teacher as a role model, and experiences in agriculture education programs and from other teaching experiences (Ingram et al., 2018; Theiman et al., 2016; Marx et al., 2017).

Implications. The reporting of a substantial relationship between attitude toward becoming a secondary school agriculture teacher and beliefs about teaching secondary school agriculture provides implications for teacher educators and secondary school agriculture teachers. To recruit more males entering the agriculture teaching profession teacher educators and secondary school agriculture teachers need to highlight the intrinsic, personal, and social values related to teaching agriculture education along with the task demand and task return of teaching. Teacher educators and secondary school agriculture teachers can promote these through providing positive teaching and learning experiences and supporting males perceived ability to teach.

Conclusion: Beliefs about teaching and decisions to become an agriculture teacher as well as beliefs about teaching and males in the teaching profession reported being moderately related.

Discussion. Participants reported two moderately related relationships regarding beliefs about teaching. First, participants reported a moderate relationship between beliefs about teaching and decisions to become an agriculture teacher. Second, participants reported a moderate relationship between beliefs about teaching and males in the teaching profession.

A moderate relationship between beliefs about teaching and decisions to become an agriculture teacher was found. The sub-constructs found within the construct of beliefs about

teaching relate to task demand and task return. Task demand refers to expert career and high demand, referring to participants views of teaching as needing specialized knowledge and requiring a demanding workload. Task return refers to social status, teacher morale, and salary, analyzing participants views of teaching as a high-status career with the ability to earn a good salary (Watts & Richardson, 2007). The construct regarding decision to teach focuses on the sub-construct social dissuasion in which participants report others influence on choosing teaching and participations satisfaction with their choice to become a secondary school agriculture teacher.

The reported moderate relationship between these two constructs is supported by the expectancy-value theory. Esscles et al. (1984, 2005a) states that expectancy beliefs are an important predictor of performance. According to Wigfield and Eccles (1992) attainment value is associated with being successful in the task at hand and cost is the sacrifice individuals incur to carry out tasks. Previous research also supports this moderate relationship between belief in teaching and decision to teach. Teacher moral amongst colleagues, a high task demand, and complexity of skills required to teach agriculture have been found as indicators in decisions to teach (Marx et al., 2017; Lawver & Torres, 2011). Social influences have also been reported as indicators of individuals decision to teach ranging from spouses, former teachers, parents, and close relatives (Ingram et al., 2018; Theiman et al., 2016).

A moderate relationship between beliefs about teaching and males in the teaching profession was also reported by participants in this study. Beliefs about teaching include sub-constructions of task demand and task return. Task demand refers to the specialized knowledge needed to teach agriculture education and the demand of the position. Participants in this study tend to agree with the sub-constructs relating to task demand. Task return focuses on the social status of the

profession, teacher morale, and salary. Participants in this study tended to agree with social status and teacher morale but were not sure about salary regarding secondary school agriculture teachers.

The construct regarding males in the teaching profession includes the five sub-constructs including salary, social status, working with adolescents, male mental mind set, and male role models. The sub-construct of salary focused on questions regarding males' perceptions of being the primary income earning for the family and salary of agriculture teachers regarding other professions and providing suitable income for the family. Social status focused on analyzing participants perceptions towards males in the teaching profession such as masculinity. Working with adolescents asked participants questions regarding fear of working with adolescents as a male. The male mental mindset sub-construct focused on the idea of having more male teachers and their ability to motivate and provide learning opportunities geared toward the male mind. The sub-construct regarding male role models focused on the need more having more male role models in schools. Participants in this study tend to agree with the sub-constructs including salary, male mental mindset, and male role models. However, they were unsure about the sub-constructs regarding social status and working with adolescents.

Tyre (2008) and Johnson (2008) reported that males believe they are the primary wage earner of the family and that teachers are amongst the lowest paid jobs compared to industry. This supports the findings of males agreeing with the male salary in teaching sub-construct and being unsure about the salary sub-construct regarding secondary school agriculture teachers.

Participants in this study tended to agree with the social status sub-construct within task return of teaching secondary school agriculture as having a high social status. Conversely, participants tended to be not sure regarding males' social status being less masculine and having

a fear of working with adolescents. This contradicts Johnson (2008) that the educational profession not being held in the same regard as other careers and that male teachers aware of this social status. It also contradicts Johnson (2008) and Tyre (2008) discussing males having a fear of working with adolescents and a stereotype of male teachings having a lack of masculinity.

Participants in this study tended to agree with the task demand sub-construct regarding to an expert career and high demand career. Additionally, participants tended to agree with the male mental mindset and male role model sub-constructs. This algins with Gurian and Stevens (2005) discussion of the need for males to learn through spatial-mechanical stimulation and a need to move toward more physical learning for males to become more motivated in learning.

Implications. Finding a moderate relationship between participants beliefs about teaching and decision in teaching as well as between participants beliefs about teaching and males in the teaching profession provides implications for teacher educators and secondary school agricultural teachers. The expectant-value theory places emphasis on beliefs as an indicator of performance. Teacher educators and secondary school agriculture teachers should emphasize the importance of the highly specialized knowledge needed for agriculture education teachers to males within agriculture education. Teacher educators and secondary school agriculture teachers should also highlight the ability of agriculture education as a means of providing learning opportunities geared toward the way males learn and think as males in this study agreed that becoming a male secondary school agriculture teach would provide opportunities to motivate males in learning and provide learning opportunities geared to the way the male brain learns.

Finding a moderate relationship between belief in teaching secondary school agriculture education and males in the teaching profession provides implications for further research. Males in this student tended to agree that teaching secondary school agriculture education was a high-

status and well-respected career. However, they were not sure in regard to the social status of males in the teaching profession as well as if males felt that working with adolescents was risky or fearful for males entering the teaching profession. Therefore, further research should be conducted to determine if males feel differently about the teaching profession regarding social status and working with adolescents in other subject areas.

Research Question 4- What are the relationships of attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males and teaching and the characteristics of participants?

Conclusion: A moderate relationship was reported between FFA membership and attitude toward becoming a secondary school agriculture teacher as well as between FFA leadership at the local level and attitude toward becoming a secondary school agriculture teacher.

Discussion. Two moderate relationships were found between attitude toward becoming a secondary school agriculture teacher and characteristics of the participants. First, a moderate relationship was found between FFA membership and attitude toward becoming a secondary school agriculture teacher. Second, a moderate relationship was found between FFA leadership at the local level and attitude toward becoming a secondary school agriculture teacher. The construct of attitude toward teaching secondary school agriculture education includes sub-constructions relating to self-perception, intrinsic career value, personal utility value, social utility value, fallback career, and prior teaching and learning experiences.

These relationships are supported by previous research. Participants' experiences through FFA were found to serve as a motivator to purse teaching agriculture as a career (Ingram et al.,

2018; Thieman et al., 2016; Marx et al., 2014). Research has shown that experiences through FFA have developed individual's self-efficacy in teaching as well as personal connections to and a passion for agricultural education (Marx et al., 2014; Ingram et al., 2018).

Implications. The moderate relationship reported between attitude toward teaching secondary school agricultural education and members in FFA as well as FFA leadership at the local level provide implications for teacher educators and secondary school agriculture teachers. This relationship demonstrates that teacher educators and secondary school agriculture teachers should focus recruitment efforts on male FFA members and male officers at the local level. Additionally, secondary school agriculture education teachers should focus on providing male FFA members and male officers opportunities to develop experiences within FFA that can promote developing an attitude toward teaching secondary school agriculture education.

Recommendations for Teacher Education and Curriculum Development

Based on the findings of this study, the following recommendations are made for teacher educators:

1. Institutions with agricultural education programs focus recruitment efforts on Hispanic males.
2. Institutions with agricultural education programs focus recruitment efforts of males in current school based agricultural education programs and FFA.
3. Institutions with agricultural education programs focus on providing instruction in classroom and laboratory experience development for agricultural education majors.
4. Teacher educators make conscious efforts to provide positive learning experiences for students.

5. Institutions with agricultural education programs focus on curriculum that prepare students for highly specialized skills needed to teach secondary school agriculture.
6. Institutions with agricultural education programs focus on curriculum that prepares students to balance the roles of a secondary school agriculture teacher.
7. Institutions with agricultural education programs need to focus efforts on recruiting males into the teaching profession by promoting the need for more male role models in schools, promoting the career as a stable career path, and the ability to provide learning opportunities for males structured the way males learn best.
8. Teacher educators focus on highlighting the intrinsic, personal, and social values related to teaching agriculture education along with the task demand and task return of teaching in recruitment efforts for males.
9. Teacher educators provide positive teaching and learning experiences and support males perceived ability to teach.
10. Teacher educators should emphasize the importance of the highly specialized knowledge needed for agriculture education teachers to males within agriculture education.
11. Teacher educators should highlight the ability of agriculture education as a means of providing learning opportunities geared toward the way males learn and think.
12. Teacher educators focus recruitment efforts on male FFA members and male officers at the local level.

Recommendations for Practitioners

Based on the findings of this study, the following recommendations made are for practitioners in secondary school agricultural education programs.

1. School based agricultural education teachers promote the agricultural education teaching promotion to Hispanic males.
2. School based agricultural education teachers promote the agricultural education CDE and experiences with agricultural education supervised agricultural experience programs to males.
3. School based agricultural education teacher focus promoting teaching agriculture education to male students.
4. Male school based agricultural education teachers' focus promoting teaching agriculture education to male students.
5. School based agricultural education teachers make a conscious effort to provide positive learning experiences for students.
6. School based agricultural education teachers make efforts to speak positively about the profession and share stories of impacts on students.
7. School based agricultural education teachers make efforts to not discourage students who want to become agriculture teachers.
8. School based agriculture teachers should focus on recruiting males to become secondary school agriculture teachers by focusing on promoting the need for more male role models, demonstrating the career as a steady career path, and highlighting the learning opportunities for males within the classroom, FFA, and SAE experiences.
9. School based agriculture teachers focus on highlighting the intrinsic, personal, and social values related to teaching agriculture education along with the task demand and task return of teaching in recruitment efforts for males.

10. School based agriculture teachers provide positive teaching and learning experiences and support males perceived ability to teach.
11. School based agriculture teachers should emphasize the importance of the highly specialized knowledge needed for agriculture education teachers to males within agriculture education.
12. School based agriculture teachers should highlight the ability of agriculture education as a means of providing learning opportunities geared toward the way males learn and think.
13. School based agriculture teachers should focus recruitment efforts on male FFA members and male officers at the local level.
14. School based agriculture teachers should focus on providing male FFA members and male officers opportunities to develop experiences within FFA that can promote developing an attitude toward teaching secondary school agriculture education.

Recommendations for Further Research

Recommendations for further research include:

1. Replicate this study in areas that have Hispanic student serving institutions to determine the current enrollment of Hispanic males in agricultural education majors.
2. Determine the external environmental factors (i.e. household structure, social economic status, etc.) which affect secondary school agriculture education students' membership in FFA.
3. Determine the external environmental (i.e. household structure) factors, which affect secondary school agriculture education students' involvement in FFA activities.

4. Determine if male secondary school agricultural education students select courses based on the gender of the teacher.
5. Determine the need of additional agricultural pathway curriculum areas for curriculum preparation of male agricultural education majors.
6. Determine the view of males regarding teaching other subject areas.
7. Determine if males feel differently about the teaching profession regarding social status and working with adolescents in other subject areas.

Summary

This chapter presented a summary of the research questions that guided this study. This chapter also provided conclusions based on the findings of the study along with recommendations for teacher educators and curriculum development, practitioners, and future research. The research questions guiding this study included: (1) What are the demographics of males choosing to major in agricultural education?; (2) What factors affect males' pursing an agriculture education degree and becoming a secondary school agriculture teacher?; (3) Are there relationships between attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males in the teaching profession of males pursing an agriculture education degree?; (4) What are the relationships of attitudes toward becoming a secondary school agriculture teacher, beliefs about teaching, decisions to become a teacher, and males and teaching and the characteristics of participants?.

The findings of this study indicated that: (1) Participants in this study were primarily Caucasian (89.1%), juniors in college (31.3%), and grew up in a household structure that contained a mother and father figure (82.8%); (2) Participants in this study were enrolled in a

secondary school agricultural education program and members of FFA (95.3%), most active in career development events (88.52%), and had a supervised agricultural experience program (93.8%); (3) Over three fourths of participants enrolled in an agricultural education program had a male agriculture teacher/FFA advisor (78.68 %); (4) Participants in this study primarily indicated that they looked to their agriculture teacher/FFA advisor for mentorship (57.8%) and Agriculture teachers (75.5%) were the most influential people in participants' decision to teach secondary school agricultural education; (5) Participants are most excited to teach the classroom/laboratory component (45.3%) of the three-circle model of agricultural education and are most suited to teach animal systems curriculum (37.5%); (6) Participants definitely agreed with three sub-constructs regarding attitude toward teaching secondary school agricultural education including, "make a social contribution"; "shape the future of adolescents", and "prior teaching and learning experiences."; (7) Participants agree with three sub-constructs regarding belief about teaching including "high demand"; "expert career", and "social status"; (8) Participants agreed with both sub-constructs "satisfaction with choice" and "social dissuasion" regarding their intention to teach secondary school agricultural education; (9) Participants agreed with three sub-constructs regarding males in the teaching profession including "male mental mindset"; "salary"; and "male role models"; (10) Attitudes toward becoming a secondary school agriculture teacher and beliefs about teaching reported a substantial relationship; (11) Beliefs about teaching and decisions to become an agriculture teacher as well as beliefs about teaching and males in the teaching profession reported being moderately related; (12) A moderate relationship was reported between FFA membership and attitude toward becoming a secondary school agriculture teacher as well as between FFA leadership at the local level and attitude toward becoming a secondary school agriculture teacher.

This chapter then presents discussions and implications of the findings. Future recommendations for teacher education and curriculum development, partitioners, and future research are outlined in this chapter.

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Apppendix A: MSU IRB Approval Letter

MURRAY STATE UNIVERSITY

Institutional Review Board

328 Wells Hall
Murray, KY 42071-3318
270-809-2916 • msu.irb@murraystate.edu

TO: Alyx Shultz, Hutson School of Agriculture

FROM: Reigh Kemp, IRB Coordinator and Megan St. Peters, IRB Member RK

DATE: 10/10/2023

RE: Human Subjects Protocol I.D. – IRB #24-057

The IRB has completed its review of your student's exempt protocol entitled *Factors that Influence Males to Teach Agricultural Education*. After review and consideration, the IRB has determined that the research, as described in the protocol form, will be conducted in compliance with Murray State University guidelines for the protection of human participants.

The forms and materials that have been approved for use in this research study are attached to the email containing this letter. These are the forms and materials that must be presented to the subjects. Use of any process or forms other than those approved by the IRB will be considered misconduct in research as stated in the MSU IRB Procedures and Guidelines section 20.3.

Your stated data collection period is from 10/10/2023 to 10/10/2024.

If data collection extends beyond this period, please submit an Amendment to an Approved Protocol form detailing the new data collection period and the reason for the change.
This Exempt from Further Review approval is valid until 10/09/2024.

If data collection and analysis extends beyond this date, the research project must be reviewed as a continuation project by the IRB prior to the end of the approval period, 10/09/2023. You must reapply for IRB approval by submitting a Project Update and Closure form (available at murraystate.edu/irb). You must allow ample time for IRB processing and decision prior to your expiration date, or your research must stop until such time that IRB approval is received. If the research project is completed by the end of the approval period, then a Project Update and Closure form must be submitted for IRB review so that your protocol may be closed. It is your responsibility to submit the appropriate paperwork in a timely manner. The protocol is approved. You may begin data collection now.

Appendix B: Pre-Notice Email

SUBJECT LINE: Factors that Influence Males to Teach Study

Dear Dr. {INSERT NAME HERE},

Thank you for agreeing to participate in my study. I hope that the semester is going well for you.

I have received IRB approval from Murray State and I am ready to distribute my questionnaires. This is your official invitation to aid with this study. Your role will be to assist in distributing the questionnaires to male agricultural education students in your program. I have the ability to send you a packet of questionnaires with an addressed return envelope and/or an electronic version.

Please let me know which method you prefer or if you would like me to provide you with both options. In our previous conversation, you indicated that you have ____ males enrolled in your program. If you would like a packet of questionnaires, please confirm the number as mentioned above and provide me with the best address to send the packet.

My goal is to receive the questionnaires back by **November 3, 2023.** However, if there is an issue or time restraint please do not hesitate to contact me at athoron@murraystate.edu.

Thank you again for assisting me with this study. I look forward to receiving your responses. Please let me know if you have any questions or concerns.

Purpose of the Study

The purpose of this study is to determine factors that influence males to teach agricultural education. This study focused on males who have chosen to enroll in agricultural education programs at the post-secondary level.

Research Questions

1. What are the demographics of males choosing to major in agricultural education?
2. What factors affect males' pursuing an agriculture education degree and becoming an agriculture teacher?
3. Are there relationships between attitudes toward becoming an agriculture teacher, beliefs about teaching, decisions to become a teacher, and influencers on the decision to teach of males pursuing an agriculture education degree?

Sincerely,

Ashley Thoron

Murray State University

Graduate Student

Appendix C: Follow-up Email

SUBJECT LINE: Factors that Influence Males to Teach Study

Dear Dr. {INSERT NAME HERE},

Thank you again for agreeing to participate in my study. Recently, you received either a packet of questionnaires in the mail or an electronic link to a questionnaire asking for your assistance in collecting data from male agriculture education students in your program. I am contacting you to check the status of the *Factors that Influence Males to Teach Agriculture Education* questionnaires mailed to you earlier this month.

If you have chosen to receive paper copies of the questionnaire, and you already collected completed questionnaires and returned them to me, thank you for doing so, and please disregard the remainder of this e-mail.

If you have not returned completed questionnaires this is a reminder that this is your final chance to participate in this study. Included is a brief reminder of your responsibilities and the time requirement for students. If you could please have, students complete the questionnaires and mail them to me by **November 3rd** that would be greatly appreciated.

Your responsibility: To assist in this study please distribute the enclosed questionnaires to males enrolled in your agricultural education program. Please collect the questionnaires after completion and return them in the self-addressed, stamped envelope by **November 3rd, 2023.**

If you have chosen to receive an electronic link to the questionnaire, please send one final reminder email to your students asking them to participate.

Time required: The questionnaire should take approximately 20-30 minutes for individuals to complete

Please let me know if you have any questions or concerns. Again, thank you for your assistance with collecting data for this study.

Sincerely,

Ashley Thoron

Murray State University

Graduate Student

Appendix D: Modified Ag ED FIT Choice Instrument

Factors that Influence Males to Teach Agricultural Education

Study Title: Factors that Influence Males to Teach Agricultural Education

Primary Investigator: Ashley Thoron, Educational Studies, Leadership, and Counseling
Faculty Sponsor Contact: Dr. Alyx Shultz, 270-809-6925, ashultz@murraystate.edu

You are being invited to participate in a research study conducted through Murray State University. This document contains information you will need to help you decide whether to be in this research study or not. You must be at least 18 years old to participate. Please read the form carefully and ask the study team member(s) questions about anything that is not clear.

1. **Nature and Purpose of Project:** The purpose of this study is to determine the factors that influence males to teach agricultural education. The absence of males in teaching has become a universal trend seen throughout all fields of education. The gender division in the teaching profession has impacts on the underachievement of boys in school and the need for young men to have strong role models. It is essential to understand the factors that influence males to teach agricultural education in order to identify ways to recruit males into the profession.

2. **Participant Selection:** You are being asked to participate because you are a male enrolled in an agricultural education program.

3. **Explanation of Procedures:** The study activities include completing the attached questionnaire. Study duration: The questionnaire should take approximately 20-30 minutes for individuals to complete.

4. **Discomforts and Risks:** There are no anticipated risks and/or discomforts for participants.

5. **Benefits:** This study is not designed to benefit you directly. However, your participation may help to increase our understanding of the factors that influence males to teach agricultural education.

6. **Confidentiality:** Your participation in this study is anonymous. Neither the researcher(s) nor anyone else will know if you have participated or how you responded.

7. **Refusal/Withdrawal:** Your participation is strictly voluntary and you are free to withdraw/stop participating at any time with absolutely no penalty. You are free to skip any questions that you would prefer not to answer.

8. **Contact Information:** Any questions about the procedures or conduct of this research should be brought to the attention of Dr. Alyx Shultz at 270-809-6925 or ashultz@murraystate.edu.

Completing the following questionnaire indicates that this study has been explained to you, that your questions have been answered, and that you agree to take part in this study.

This project has been reviewed and approved by the Murray State University Institutional Review Board (IRB) for the Protection of Human Subjects. If you have any questions about your rights as a research participant, you should contact the MSU IRB Coordinator at (270) 809-2916 or msu.irb@murraystate.edu.

Part 1:

Attitude toward Becoming a Secondary School Agriculture Teacher

Directions: For each statement below, please rate your level of agreement *(definitely disagree to definitely agree, or not sure)* regarding your career decision to teach secondary school agricultural education. Please bubble in the circle that best reflects your attitude.

An example is provided.

"I want to become a secondary school agriculture teacher because…."	Definitely Disagree	Disagree	Not Sure	Agree	Definitely Agree
Example: I am interested in fishing.	○	○	●	○	○
This person is not sure about his/her interest in fishing.					
1. I am interested in teaching secondary school agriculture.	○	○	○	○	○
2. teaching agriculture could allow for more family time.	○	○	○	○	○
3. my friends think I should become a secondary school agriculture teacher.	○	○	○	○	○
4. agriculture teachers have lengthy holidays.	○	○	○	○	○
5. I have the qualities of a good agriculture teacher.	○	○	○	○	○
6. teaching agriculture allows me to provide a service to society.	○	○	○	○	○
7. I have always wanted to become an agriculture teacher.	○	○	○	○	○
8. teaching agriculture will be a useful job for me to have when traveling.	○	○	○	○	○
9. teaching agriculture will allow me to shape adolescent values.	○	○	○	○	○

Continued… **"I want to become a secondary school agriculture teacher because…."**	Definitely Disagree	Disagree	Not Sure	Agree	Definitely Agree
10. I want to help adolescents learn.	○	○	○	○	○
11. I was unsure of what career I wanted.	○	○	○	○	○
12. I like teaching about agriculture.	○	○	○	○	○
13. I want a job that involves working with adolescents.	○	○	○	○	○
14. teaching agriculture will offer a steady career path.	○	○	○	○	○
15. teaching hours will fit with the responsibilities of having a family.	○	○	○	○	○
16. I have had inspirational agriculture teachers.	○	○	○	○	○
17. as an agriculture teacher I will have a short working day.	○	○	○	○	○
18. I have good teaching skills.	○	○	○	○	○
19. teachers make a worthwhile social contribution.	○	○	○	○	○
20. a teaching qualification is recognized everywhere.	○	○	○	○	○
21. teaching agriculture will allow me to influence the next generation.	○	○	○	○	○
22. my family thinks I should become an agriculture teacher.	○	○	○	○	○
23. I want to work in an adolescent-centered environment.	○	○	○	○	○
24. teaching will provide a reliable income.	○	○	○	○	○
25. school holidays will fit in with family commitments.	○	○	○	○	○
26. I have had good teachers as role-models.	○	○	○	○	○

Continued… **"I want to become a secondary school agriculture teacher because…."**	Definitely Disagree	Disagree	Not Sure	Agree	Definitely Agree
27. teaching agriculture will enable me to 'give back' to society.	○	○	○	○	○
28. teaching agriculture is not my first career choice.	○	○	○	○	○
29. teaching will allow me to raise the ambitions of underprivileged youth.	○	○	○	○	○
30. I like working with adolescents.	○	○	○	○	○
31. teaching agriculture will be a secure job.	○	○	○	○	○
32. I have had positive classroom learning experiences.	○	○	○	○	○
33. people I've worked with think I should become an agriculture teacher.	○	○	○	○	○
34. teaching agriculture is a career suited to my abilities.	○	○	○	○	○
35. a teaching job will allow me to choose where I wish to live.	○	○	○	○	○
36. I chose teaching as a last-resort.	○	○	○	○	○
37. teaching will allow me to benefit the socially disadvantaged.	○	○	○	○	○
38. teaching is a fulfilling career.	○	○	○	○	○
39. teaching agriculture will allow me to have an impact on adolescents.	○	○	○	○	○
40. teaching agriculture will allow me to work against social disadvantage.	○	○	○	○	○

Part 2:

Your Beliefs About Teaching

Directions: For each statement below, please rate your level of agreement *(definitely disagree to definitely agree, or not sure)* regarding your beliefs about teaching secondary school agricultural education. Please bubble in the circle that best reflects your beliefs.

An example is provided.

"Compared with other professionals (e.g., sales persons, managers, science teachers)…."	Definitely Disagree	Disagree	Not Sure	Agree	Definitely Agree
Example: teachers are friendly.	○	○	●	○	○
This person is "not sure" about his/her belief that teachers are friendly.					
1. agriculture teachers are well paid.	○	○	○	○	○
2. agriculture teachers have a heavy work load.	○	○	○	○	○
3. agriculture teachers earn a good salary.	○	○	○	○	○
4. agriculture teachers are perceived as professionals.	○	○	○	○	○
5. agriculture teachers have high morale.	○	○	○	○	○
6. teaching agriculture is a highly skilled occupation.	○	○	○	○	○
7. teaching agriculture is emotionally demanding.	○	○	○	○	○
8. teaching agriculture is a high-status occupation.	○	○	○	○	○
9. agriculture education teachers feel valued by society.	○	○	○	○	○
10. teaching agriculture requires a high level of expert knowledge.	○	○	○	○	○

Continued… **"Compared with other professionals (e.g., sales persons, managers, science teachers)…."**	Definitely Disagree	Disagree	Not Sure	Agree	Definitely Agree
11. teaching agriculture is hard work.	○	○	○	○	○
12. teaching agriculture is a well-respected career.	○	○	○	○	○
13. agriculture teachers feel their occupation has a high social status.	○	○	○	○	○
14. agriculture teachers need a high level of technical knowledge.	○	○	○	○	○
15. agriculture teachers need highly specialized knowledge.	○	○	○	○	○

Part 3:

Your Decision to Become a Teacher

Directions: For each statement below, please rate your level of agreement *(definitely disagree to definitely agree, or not sure)* regarding your decision to become a secondary school agriculture teacher. Please bubble in the circle that best reflects your belief.

An example is provided.

	Definitely Disagree	Disagree	Not Sure	Agree	Definitely Agree
Example: I have carefully thought about my hobbies.	○	○	●	○	○
This person is "not sure" about how careful he/she has thought about his/her hobbies.					
1. I have carefully thought about becoming an agriculture teacher.	○	○	○	○	○
2. I was encouraged to pursue careers other than teaching agriculture.	○	○	○	○	○
3. I am satisfied with the choice to become an agriculture teacher.	○	○	○	○	○
4. Others have told me that teaching agriculture was not a good career.	○	○	○	○	○
5. I am happy with my decision to become an agriculture teacher.	○	○	○	○	○
6. Others influenced me to become an agriculture teacher.	○	○	○	○	○

Part 4:

Males and Teaching

Directions: For each statement below, please rate your level of agreement *(definitely disagree to definitely agree, or uncertain)* regarding your beliefs about males in the teaching profession. Please bubble in the circle that best reflects your belief.

An example is provided.

	Definitely Disagree	Disagree	Not Sure	Agree	Definitely Agree
Example: I believe that running is a good way to exercise.	○	○	●	○	○
This person is "not sure" if he/she believes running is a good way to exercise.					
1. Teaching agriculture is more masculine than teaching other subject areas.	○	○	○	○	○
2. Other males perceive teaching has a lower salary than other industry/professions.	○	○	○	○	○
3. Working with adolescents is more risky for male teachers than female teachers.	○	○	○	○	○
4. Having more male agriculture teachers will motivate male students.	○	○	○	○	○
5. Young males need more male role models in the school environment.	○	○	○	○	○
6. Other males do not choose teaching as a career because they perceive it as 'women's work'.	○	○	○	○	○
7. Teaching agriculture will enable me to provide suitable income for my family.	○	○	○	○	○

Continued…	Definitely Disagree	Disagree	Not Sure	Agree	Definitely Agree
8. Other males do not choose teaching as a career for fear of with working with adolescents.	○	○	○	○	○
9. Having more male agriculture teachers will increase young males' decision to become agriculture teachers.	○	○	○	○	○
10. Teaching agriculture will allow me to serve as a role model for young males.	○	○	○	○	○
11. Other males do not choose teaching as a career for a fear of being seen as 'less masculine'.	○	○	○	○	○
12. As a male, I feel that I am responsible for providing the primary income for my family.	○	○	○	○	○
13. Teaching agriculture as a subject area has less fear for working with adolescents than other subject areas.	○	○	○	○	○
14. Teaching agriculture enables me to provide more learning opportunities that are suited for the way young males learn.	○	○	○	○	○
15. Young males have adequate male role models in the school environment.	○	○	○	○	○

Part 5: About You

Directions: Please share more about yourself, by bubbling in the circle if the response that best represents you.

1. What is your classification in college?
    - Freshman
    - Sophomore
    - Junior
    - Senior
    - Graduate Student

2. Please specify your ethnicity.
    - Caucasian
    - African-American
    - Latino or Hispanic
    - Asian
    - Native American
    - Native Hawaiian or Pacific Islander
    - Other

3. What was your household structure as a child?
    - Mother & Father *(Biological, Adoptive, Step)*
    - Single Parent
        - Mother
        - Father
    - Other Relatives (*Grandparents, Aunts/Uncles, etc.)*
    - Other

4. Whom did you look to for mentorship most during your high school years?
    - Mother
    - Father
    - Agriculture Teacher/FFA Advisor
    - 4-H Leader
    - Coach
    - Academic Teacher
    - Church Leader/Minister/Pastor
    - Other

5. Have you ever been a member of 4H?
    - Yes
        - If "Yes"
          What was your 4-H leader's gender?
            - Female
            - Male
    - No

6. Did you take agricultural education in high school?
    - Yes
        - If "Yes"

            Were any of your agriculture teachers male?
            - Yes
            - No

            If you had multiple teachers, did you look to one for more mentorship over the others?
            - Yes
                - If "Yes"

                    What was the teacher's gender?
                    - Female
                    - Male
            - No
    - No

7. Have you ever been a member of FFA?
    - Yes
        - If "Yes"

            Were any of your FFA advisors male?
            - Yes
            - No

            If you had multiple advisors, did you look to one for more mentorship over the others?
            - Yes
                - If "Yes"

                    What was the teacher's gender?
                    - Female
                    - Male
            - No

            What was your involvement in FFA? Please mark all that apply.
            - Leadership Office (Local Level)
            - Leadership Office (Region, State, National Level)
            - Career Development Events (CDE)/Leadership Development Events (LDE)
            - Local Activities
            - Awards Programs (Proficiencies, Agriscience Fair, etc.)
    - No

8. Did you have a Supervised Agricultural Experience (SAE) project?
    - Yes
        - If "Yes"
          What type of SAE project did you have?
            - Entrepreneurship
            - Placement
            - Research/Experimentation
            - Foundational/Exploratory
    - No

9. Who was the most influential in your decision to become an agriculture teacher?
    - Mother
    - Father
    - Friends
    - Agriculture Teacher/FFA Advisor
    - 4-H Leader
    - Other

10. What component of the three-circle model of agriculture education are you most excited to teach?
    - Classroom/Laboratory
    - Supervised Agricultural Experience (SAE)
    - FFA

11. What pathway of agriculture do you feel MOST suited to teach?
    - Agribusiness Systems
    - Animal Systems
    - Biotechnology Systems
    - Environmental Service Systems
    - Natural Resource Systems
    - Plant Systems
    - Power, Structural, and Technical Systems

12. Please take this opportunity to offer any additional comments about your career decision you wish to offer.

    _____
    _____
    _____
    _____
    _____

Thank you for taking your time to give your thoughts and beliefs about why males choose to teach agriculture.