

The Influence of School-Based Agricultural Education on Preservice Agriculture Teachers' Choice to Teach

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Abstract

Nationwide, agricultural education has experienced a shortage of qualified school-based agriculture teachers for over four decades. Students who seek careers as agriculture teachers are often those who participated in agricultural education and FFA in high school. The Ag Ed FIT-Choice® Model (Lawver 2009; Lawver & Torres, 2012) was used as the investigative framework for this phenomenological study, which sought to explore how active participation in school-based agricultural education programs influenced students' choice to major in agricultural education and pursue a career in teaching. Seven agricultural education majors who participated in agricultural education and FFA in high school participated in a focus group interview. Transcripts of the focus group interview were analyzed and coded for thematic content using open, axial, and selective coding protocols. Five themes emerged from the data, which included, 1) socializer influencers, 2) social value 3) passion for agriculture, 4) alignment with personal values, and 5) agricultural education factors. The agricultural education factors theme was broken into four sub-themes, which include agriculture teacher encouragement, FFA events, increased self-efficacy through a quality program, and post-high school opportunities. Based on the findings, implications and recommendations for recruitment are discussed.

Key Words: career choice, school-based agricultural education, preservice teachers, FFA

Introduction

The agricultural education profession has been plagued with a shortage of teachers for more than 40 years (Kantrovich, 2010). The most recent supply and demand study reported a total of 7,775 school-based agricultural education programs employing 11,557.5 teachers in the beginning of the 2016 school year, of those, 1476 (13%) were considered new hires in school-based agricultural education (Smith, Lawver, & Foster, 2016). Further, there were 66 full-time agricultural education vacancies yet to be filled (Smith et al., 2016). The lack of qualified agriculture teachers also impacts schools and districts desiring to open new programs or replace agriculture teachers who leave the classroom. Smith et al. (2016) report the majority of new hires in school-based agricultural education are newly licensed graduate and undergraduate students (37.8%), followed by current teachers changing schools (36.5%) and non-licensed or alternatively

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licensed agriculture teachers (22%). The inability to find sufficient qualified teachers to replace those who leave could mean termination of an entire program.

Solving the teacher shortage in agricultural education is imperative to meet the scientific and professional agricultural workforce demands of this century. Today's agricultural and STEM employers throughout the U.S. report shortages of skilled workers (Goeker, Smith, Fernandez, Ali, & Theller, 2015; U.S. Congress Joint Economic Committee, 2012). Priority area three of the 2015-2020 National Research Agenda of the American Association for Agricultural Education places emphasis on attracting and developing the next generation of agricultural scientists (Stripling & Ricketts, 2016). Obtaining individuals to fill these positions as well as creating an educated workforce is critical in addressing the current and future agricultural workforce demands. One way to address the demand is through school-based agricultural education. According to Phipps and Osborne (1988), the most important function of school-based agricultural education is to prepare youth for careers in agriculture. Frazee and Briers (1987) explained the longer and more involved students become in agricultural education and specifically in the FFA, the more likely they are to pursue an occupation in agriculture.

Few studies in agricultural education have tried to explain the influence of school-based agricultural education on the career choice to become agriculture teachers. In earlier studies, researchers concluded that students who were involved in FFA and SAE activities were more likely to choose agricultural education as a college major (Cole, 1984; Miller, Williams, & Sprouse, 1984). In a more recent study, Lawver and Torres (2012) concluded agricultural education classes, FFA, and SAE activities did contribute to students' attitudes about their ability to teach agriculture. Furthermore, anecdotal evidence suggests a large proportion of students who enter agricultural education preservice programs across the country were once participants in school-based agricultural education programs themselves. Yet, there is a shortage of literature exploring *how* FFA, SAE, and agricultural education involvement might influence one's choice to teach agriculture.

Park and Rudd (2005) conducted a Delphi study with in-service teachers exploring the teaching practices that would increase recruitment of students into post-secondary agricultural education majors. However, they did not survey students, the ones making the decisions. In fact, they recommended, "Future research is necessary to determine the influencing factors associated with the decision to teach from the student perspective (p. 91)." Furthermore, studies in agricultural education exploring agriculture teacher career choice have largely been quantitative in nature, focused on only a small number of variables, and have shown mixed results. For example, Lawver and Torres (2011) found little relationship between preservice teachers' intent to teach agriculture and the years enrolled in agriculture courses, years of FFA membership, and participation in SAE. Despite this finding, the vast majority of the preservice teachers from their study had indeed participated in FFA, SAE, and agricultural education courses, suggesting a need for further examination into *how* school-based agricultural education programs may have influenced students' career choice to become agriculture teachers. Perhaps the years spent in agricultural education programs and FFA are not as influential on students' agricultural education career choice as their specific lived experiences through agricultural education. Therefore, we sought to explore, through qualitative methods, *how* school-based agricultural education programs might influence students' career choice to become agriculture teachers.

Solving the teacher shortage problem will require efforts on two fronts: recruitment of more teachers into the profession and retention of those teachers within the profession (Kantrovich, 2007). In this study, our aim was to address recruitment by exploring how participation in school-based agricultural education programs influence one's choice to teach agriculture. Despite the need

and recommendation for agricultural education to recruit from areas outside of school-based agricultural education (Lawver & Torres, 2011; Marx, Smith, Smalley, & Miller, 2017), the fact that most students enrolled in preservice agricultural education programs across the country went through traditional school-based agricultural education programs, elicits the need to continue to focus research on the specific factors within school-based agricultural education programs influencing career choice. In order to develop recruitment strategies, it is imperative that researchers, teacher educators, and school-based agricultural educators understand the factors that influence students to choose agriculture teaching as a career, especially factors within school-based agricultural education programs.

One of the most significant decisions a student will make during his or her high school and college years is which career and academic major to pursue. Choosing the right career that aligns with one's values and goals has implications for a lifetime of rewards and happiness. Recruiting students with skills and values that align with the career of teaching agriculture is paramount in working to solve the teaching shortage crisis. A variety of factors influence what students will major in and what career they will choose. According to Bandura (1986), students are more likely to choose a career in which they believe they can be successful, have their needs met and be able to influence others. Self-efficacy, espoused as self-perception in the Ag Ed FIT-Choice® Model, is an important motive in selecting a major or career.

Theoretical Framework and Literature Review

The Ag Ed FIT-Choice® model adapted by Lawver (2009; Lawver & Torres, 2012) and developed and validated by Watt and Richardson (2007) and the FIT-Choice® model (Watt & Richardson, 2007; Richardson & Watt, 2006) were used as the research framework for this study. Watt and Richardson's (2007) FIT-Choice® model is based on the expectancy-value theory (EVT), which has been used to understand the motivations that triggers individuals' behaviors, including the behavior of choosing a career (Eccles et al., 1983; Eccles & Wigfield, 2002). The FIT-Choice® model was developed from themes emerging from both the teacher education literature as well as the career choice literature to explain why individuals choose teaching as a career (Watt & Richardson, 2007). Lawver (2009; Lawver & Torres, 2012) utilized Watt and Richardson's (2007) FIT-choice® model among agricultural educators to develop a conceptual model specific to agricultural education to explain career choice among individuals choosing to become agriculture teachers.

The original FIT-Choice® model framework (Watt & Richardson, 2007) consists of five influences on one's choice of a teaching career: *socialization influences*, *task perceptions*, *self-perceptions*, *values*, and *fallback career*. Watt and Richardson (2007) described *socialization influences* as positive teaching and learning experiences as well as significant people in the lives of individuals. Previous positive teaching and learning experiences can also include having good teachers. Significant individuals such as family, friends, teachers, and colleagues may influence an individuals' choice to teach as well. *Task perceptions* consist of two factors: task demand and task return. Task demand factors relate to the perceptions of teaching as a highly demanding and highly technical career requiring very specialized and technical knowledge. Task return involves the perceptions of teaching as a well-respected, high-status occupation, where teachers feel valued by society and salary is fair and good. *Self-Perceptions* are described as an individual's perceptions of their ability to teach. The FIT-Choice® model separates *values* into three expectancy-value components: intrinsic, personal utility and social utility values. Intrinsic value describes an individuals' interest and desire for teaching as a career choice. Personal utility values relate to the quality of life teaching offers. These values might include time for family, job security, more secure income, opportunities to travel, and other benefit considerations such as length of the working day

and frequency of school holidays and breaks. Social utility value describes the idea that individuals often choose to become teachers because of their strong desire to make a social contribution, enhance social equity, positively influence the lives of youth, or give back to society. The final component of the FIT-Choice® model is fallback career, which accounts for individuals who were not accepted in their first career choice, and who may have chosen teaching as a fallback career. Utilizing the FIT-Choice® framework, we seek to explore the motivations of agricultural education students to become agriculture teachers. Furthermore, we seek to explore how the influences of agricultural education programs influence students' decisions to major in agricultural education and pursue a career in teaching.

A variety of factors have been identified in the literature as influencing an individual's decision to become a teacher. Altruistic motives, such as making a contribution to society and being a role model for youth have been identified as motivating factors influencing students' choices to pursue teaching as a career (Kyracou & Coulthard, 2000; Lortie, 1975; Reid & Caudwell, 1997). According to the FIT-Choice® framework, these are identified as social utility values. Intrinsic motives, such as opportunity to express creative abilities and the ability to engage in an enjoyable subject matter have been identified as factors to pursue teaching as a career (Hayes, 1990; Lyons, 1981; Reid & Caudwell, 1997). These influencing factors are captured in the FIT-Choice® model as intrinsic and personal utility values. The literature has also identified extrinsic motives, such as a good salary as influencing students' decision to choose teaching as a career. In agricultural education, Harms and Knobloch (2005) identified that students were motivated to teach agriculture because of the salary, the benefits it provided, and the opportunity for advancement. Vincent, Henry and Anderson (2012) found students of color were motivated to major in agricultural education because of the perception of financial stability it provided.

Social factors also influence one's career choice to teach. Key people such as family, friends, and former teachers have been identified as primary influences on choosing a career in teaching (Hayes, 1990; Hillman, 1994; Reid & Caudwell, 1997). Park and Rudd (2005) stated secondary agriculture teachers influence many decisions about a student's career and further education through teacher actions, comments, and instruction. Park and Rudd suggest these positive and encouraging interactions can also lead to a career in agricultural education.

Prior teaching and learning experiences can also influence a student's decision to teach. In agricultural education, research shows high school agricultural education courses and FFA experiences as key factors in students' choice of career (Arrington, 1985; Edwards & Briers, 2001; Hillison, Camp, & Burke, 1987). Cole (1984) concluded that agriculture students who were actively involved in SAE and FFA activities were more encouraged to choose agricultural education as a college major than those who were not actively involved in those type of learning experiences. Despite these findings, literature in agricultural education has not examined *how* FFA and SAE activities influence students' choice of major.

Purpose and Research Questions

The purpose of this phenomenological research study was to explore reasons students who were active participants in school-based agricultural education programs select agricultural education as their academic major and plan to pursue a career in teaching. This analysis addresses National Research Agenda priority three, which calls for research exploring the development of a highly qualified agriculture workforce and, recognizing the importance of agricultural educators (Stripling & Ricketts, 2016). The research questions guiding this research were: 1) what factors influence the choice to major in agricultural education and pursue teaching, and 2) in what way do

experiences in the school-based agricultural education program influence one's choice to major in agricultural education and pursue teaching as a career?

Methods

This qualitative study used a phenomenological research design to obtain information regarding the motivation of students seeking a career in agricultural education. Phenomenological research seeks to describe the meaning of individuals' experiences of a phenomenon (Creswell, 2007). The phenomena of interest, shared by all the participants, is their major in agricultural education and shared interest in becoming agriculture teachers.

Students participating in this study were accessed based on their participation of an online survey of a random sample of students in the College of Agriculture and Applied Sciences at Utah State University in which they indicated willingness to participate in the focus group interview. We selected participants from the accessible population through purposive sampling for maximum variation in an attempt to develop a wide picture of the phenomenon (Patton, 2002). Seven agricultural education majors who participated in agricultural education and FFA in high school participated in the study. Polkinghorne (1989) suggested between five and 25 subjects who have all experienced the phenomena of interest should be interviewed. Four participants were male and three were female and all reported to be White. Six of the students were between the ages of 19 and 23 while one of the students was over the age of 25 and considered a non-traditional student. One participant was a freshman, five were juniors, and one was a senior in the middle of the student teaching practicum. Three participants had changed their major to agricultural education after first seeking degrees in other disciplines. Four of the participants came from large multi-teacher agriculture programs in suburban areas while three originated from single-teacher and more rural programs.

The semi-structured interview consisted of a series of questions addressing topics about reasons for choosing agricultural education as a major, FFA, SAE, and agricultural education participation. Broad questions were asked that addressed topics of interest with some follow up questions to elicit more details (Denzin & Lincoln, 2011). Sample questions included, "Why did you choose to major in agricultural education?" and "How did FFA influence your decision to major in agricultural education?" with a follow up question: "What specific FFA events or activities had an influence on your decision and how?" The lead researcher served as the moderator for the focus group interview while another researcher took observational notes. The interviews lasted for 70 minutes and took place at the agricultural education facility.

The focus group interviews were audio-recorded and transcribed verbatim. The data collected were analyzed and coded for thematic content using coding protocols outlined by Auerbach and Silverstein (2003). Two separate researchers performed the coding process with constant checks for accuracy and reliability in coding. The process of coding was performed using open, axial, and selective coding (Auerbach & Silverstein, 2003). We used open coding to identify and describe the repeating ideas found in the text with consideration to the research focus and the theoretical framework of the study. We grouped these repeating ideas into logical and coherent groups. We then conducted axial coding, in which we examined how the categories might be related to each other. During this phase, we connected categories with subcategories. The final step in the analysis was selective coding where we renamed the themes and situated them within the theoretical framework of the study.

Rigor and trustworthiness were established for this study through measures of credibility, transferability, dependability, and confirmability (Harrison, MacGibbon, & Morton, 2001). To

establish credibility, we used an outside source to review the transcription and coding for validation. We also utilized member checks and used a reflective journal to help identify any research biases. Transferability was attained through the use of purposive sampling for maximum variation of characteristics of the participants as well as the use of rich, thick descriptions of the participants and their context (Maxwell, 2005). Finally, dependability and confirmability were established through an audit trail, the use of a reflective journal throughout the process, and receiving approval of the findings from participants (Denzin & Lincoln, 2011).

Findings

Participants identified several motivating influences regarding their decision to major in agricultural education. Five themes with corresponding sub-themes developed through the analysis of the data, which included, 1) socializer influencers, 2) social value 3) passion for agriculture, 4) alignment with personal values, and 5) agricultural education factors.

Theme 1: Socializer Influencers

Most of the participants spoke about key individuals who influenced their decision to pursue agricultural education. Each of the participants talked about key individuals, most of which they had close relationships with, encouraged them to pursue agricultural education. The encouragement was not always verbal, however, as many participants spoke about how they experienced or witnessed an agriculture teacher's impact on others, instilling a desire to be that same type of person. These key influencers that were spoken of by the participants included spouse, FFA advisor, extension agent, former teacher, and close relative.

Despite encouraging influences, participants also spoke of social pressure from individuals discouraging them from pursuing a degree in agricultural education. The participants shared that others had a negative opinion of teaching as a profession, mostly because of the lack of pay. One participant said, "That is always what you hear, you don't want to be a teacher, you don't make any money." Despite the social pressures discouraging these participants from pursuing a degree in agricultural education, other factors seemed to outweigh the opinions about teachers' salaries. One participant stated, "Regardless of cash that comes in or everybody else's opinion of educators, I'm going to be a teacher, I don't care what they think of it." The same student continues, "Regardless of the people that told me don't do it, I thought of it representing something big or something better, like agricultural education can be." This altruistic attitude emerged in the data as the second theme.

Theme 2: Social Value

A second theme emerging from the data was social value. The participants seemed to all convey a sense of altruism as they talked about why they want to become agriculture teachers. To the participants, being an agriculture teacher means exerting a positive influence in the lives of young people. This idea is what drives them to pursue a degree in agricultural education. The following participant statements support this theme:

- "As an agriculture teacher, you're also an advisor so you get to develop those relationships, you're more than just a teacher, you get to have an influence."
- "Being a part of something huge but still being able to make a difference, an impact on an individual level was probably what influenced me to become a teacher."
- "Agriculture teachers are not teachers, they're advisors, they're life coaches, they're mentors, they're always there for you. That's why I want to teach agriculture."

Students mentioned they didn't want to teach any other subject because agricultural education provides unique relationships and better opportunity to impact students' lives than any other subject. One student stated, "...The opportunities we get to spend with our students. We get to do professional development with our high school students. A lot of high school students don't get to experience that just through their classes. They get that through FFA, they get that through hands-on agriculture courses. We get to know our students better, we spend more time with them and we get to know their families." Another reason these participants are motivated to teach agriculture is their passion for it, which is the third theme.

Theme 3: Passion for Agriculture

A third theme that emerged from the data was the participants' passion for agriculture and their desire to share that passion with others. Because of their passion for agriculture, many of the participants described themselves as advocates and explained the best way to be an advocate was by teaching youth about agriculture. The following statements support this theme:

- "It's [agriculture] my passion. How cool is it that I can share my passion every day? I get to teach agriculture; I get to be a part of agriculture every day in the classroom."
- "I can share my passion for agriculture with others through being a teacher and get just as much enjoyment as any other profession can bring while moving agriculture forward and bettering the world and our community."
- "I want to be an advocate for agriculture, and that's why I changed my major."

Theme 4: Alignment with Personal Values

A fourth theme that emerged was alignment with personal values. This theme describes how teaching agriculture seems to fit nicely within the goals and values of each of the participants. The participants spoke about job security and the opportunities for family and leisure as an agriculture teacher. Many of the participants shared their feelings about their future and the type of life they want to live. They spoke mainly about their hopes to spend time with their future families as well as hobbies they can enjoy while working as an agriculture teacher. Most of the participants felt that being an agriculture teacher would allow them to pursue a lifestyle that aligned with their personal values and goals. Participants stated:

- "How many teachers get to bring their kids to activities? And you get to do fun things over the summer and your family is invited."
- "I could be an agriculture teacher, have a career, and still keep all of those things I worked hard for in high school and still keep them going as hobbies."
- "My agriculture teachers showed me how their career worked so well with their goals and hobbies and all their other stuff that they do, which made me realize I could do it too."

Theme 5: Agricultural Education Factors

A fifth and final theme that emerged was the influence of agricultural education factors, which shaped the participants' perceptions about teaching agriculture. One of the questions guiding this study was the way in which participation in the high school agricultural education program influences students' motivation to pursue agricultural education as a major. Participants in this study continually referred to specific instances from experiences related to their participation in agricultural education in high school. This theme and sub-themes help to explain how participation in school-based agricultural education programs influenced these students' decisions to pursue a degree in agricultural education. This theme was broken into four sub-themes, which include

agriculture teacher encouragement, FFA events, increased self-efficacy through a quality program, and post-high school opportunities.

Agriculture Teacher Encouragement. Most participants spoke in some way about how their agriculture teacher was influential in their decision to pursue a degree in agricultural education. Though these participants went through agriculture programs that were vastly different, their experiences of their agriculture teachers encouraging them and talking to them positively about agricultural education as a career was a unifying characteristic among the participants. Participants were encouraged by their agriculture teachers in many ways including explicitly encouraging them to consider becoming an agriculture teacher, speaking positively about their jobs as agriculture teachers, showing students the joy that comes from teaching, and taking personal interest in their students' lives. The following participant statements support this idea:

- “It was originally my ag teacher who put the idea of agriculture education in my mind.”
- “I spent a few afternoons, a few days chatting with my advisor and talking to him about his experience as a teacher, and it was at that point that I decided that I wanted to be an agriculture teacher, and I’ve stuck with it ever since.”
- “My agriculture teacher related it to me that I could be an agriculture teacher...”

Despite these positive encouraging teachers, some of the participants shared moments from their high school experiences that were not so positive in nature. The participants shared how some of these moments or experiences made them think to themselves, “If I became a teacher, I would not do it like this...” At the time, some of the participants never thought about becoming an agriculture teacher, but as they entertained the thoughts of how they would do things differently, they seemed to open a window of opportunity for a career in agricultural education. One student recounts, “I saw where the program could be and I lived through what it wasn’t and I wanted to change that in another kid’s life.” Another student stated, “If you have a crummy agriculture teacher like mine, you lose that opportunity and that potential to influence a kid to do good and be successful in life...I want to be able to make that difference in that kid’s life, so they don’t have the experience I did, so that they would have a better experience.”

FFA events participation. Many participants identified specific moments in their life when they made the decision to become agriculture teachers, or when they decided agricultural education could be a possible career path for them. Many of these moments happened at FFA events away from the local school. Participants mentioned the State FFA Convention, National Convention, CDE events, and Teach-Ag workshops as catalysts for their motivation to pursue a career in teaching agriculture. For some, these events completely changed their perception of agricultural education. The following participant statements support this idea:

- “I also think the bus rides to and from conventions and contests—getting to know my agriculture teacher—that has just really solidified it all for me.”
- “I was sitting at National Convention...and they did this campaign on Teach-Ag...and it just hit me at that moment that teaching agriculture is what I was supposed to do.”
- “The big thing that got me was my ninth grade year when I went to nationals as an Agriscience Fair participant. And then as soon as I saw nationals I was hooked because it was something so big, it was an organization that was huge that each person in the organization can make a difference in.”

Self-efficacy through a quality program. Participants shared how their agricultural education program provided them with skills, experiences, and confidence that would enable them to be successful as agriculture teachers. One student said, “The things I learned, the growth that I saw in myself, prepared me to be an agriculture teacher. If it wasn’t for that, I don’t think I would have the public speaking skills or the necessary requirement for this kind of a career.” For some students, participating in learning experiences through the FFA instilled in them a desire to share those same learning experiences with others. One student talking about his SAE experiences with showing livestock at the fair stated, “I learned what I needed to learn in class to make my SAE successful...and I really wanted to share it with people, I wanted to give that type of opportunity to other folks.” For some students, a quality agricultural education program helped them develop a personal connection, a deeper appreciation, and passion for agricultural education, which then spurred their desire to stay connected with agriculture and agricultural education in the future. Although there was little evidence in the data to suggest SAE had a direct impact on students’ choice to become agriculture teachers, it did seem to influence their decision to stay connected to agriculture. One student stated, “Because I loved my SAE project, you know, it directed me towards a career in agriculture.”

Post-high school opportunities through agricultural education. Participants spoke about the many doors that were opened to them after high school graduation because of their participation in agricultural education. The post-high school opportunities these participants spoke of included an internship with a local extension agent, serving as an FFA state officer, and working with the local agriculture program during the summer as an intern. These opportunities helped keep the students connected to agricultural education in some way. Most of these participants had not made up their mind to teach agriculture until they participated in these post-high school experiences. Each of the participants shared how the opportunities to teach and do what agriculture teachers do were the solidifying moments. One student who served as a state officer spoke about the opportunity to teach other students in a classroom. He stated, “I had the opportunity [to teach] and to see that half-second gleam in their eyes, the fact of seeing that light bulb moment behind that kid’s eye... in the classroom, that made it worth it for me, that really drew me in completely. That solidified my decision.” Another student recounted how her internship with the local agriculture program over the summer solidified her desire to be a teacher. She said, “That [summer internship] made me one hundred percent sure that I knew that’s [teach agriculture] what I wanted to do.” Finally, one student speaks of her internship with an extension agent who had taught agriculture for a time, she said, “He’s [extension agent] just what changed my mind. He told me how good of an experience he had while he was an agriculture teacher.” These opportunities to interact with others in an agricultural education context were available to these students because of their agricultural education participation.

Discussion, Conclusions and Recommendations

This research study is limited in scope because of the small number of participants, limiting the generalizability of the findings (Maxwell, 2005). While this study may have the potential to be transferable to other settings, we do not attempt to generalize beyond the seven agricultural education students in this study. Based on the findings of this study, we discovered five primary reasons participants were motivated to pursue a career teaching agriculture. These included: (a) the encouraging influence of individuals within their social structure; (b) a strong desire to be a positive influence in the lives of students; (c) passion for agriculture and a desire to share that passion with others; (d) recognition of an alignment of teaching agriculture with personal values; and, (e) the influence of agricultural education program factors.

Participants in this study indicated key individuals, including their agriculture teachers, provided encouragement to select agricultural education as a major and to enter the teaching profession. Similarly, Park and Rudd (2005) found that encouragement from agriculture teachers is a positive factor in agricultural education career decisions. These findings are also congruent with those of previous studies on teaching career decision-making (Hayes, 1990; Hillman, 1994; Lawver & Torres, 2012; Reid & Caudwell, 1997). Some participants indicated feeling social pressure not to teach and encouragement to pursue a more lucrative profession, but these teachers were not easily discouraged from teaching (Lawver & Torres, 2012). The influence of significant individuals on career decision identified in this study, both encouraging and dissuasive, align with the *socialization influences* component of the FIT-Choice® framework (Watt & Richardson, 2007). Personal encouragement of students to become agriculture teachers, speaking positively about the job, and showing students the joy that comes from teaching agriculture are important in influencing potential teachers. We echo the recommendation of Park and Rudd (2005) to agriculture teachers that “employing encouraging attitudes and behaviors, agriscience teachers could help recruit new teachers into the profession” (p. 91). Further, we recommend agriculture teachers identify students who show potential for becoming good agriculture teachers and then explicitly encourage them to consider agricultural education as a career. We would encourage state staff to utilize the National Teach Ag Campaign as a vehicle for teachers to positively encourage students towards a career in agricultural education.

A strong desire to be a positive influence in the lives of students surfaced as a primary factor in the career decision-making process for the participants in this study. Participants shared their desire to make a difference in lives of students, their desire to make a social contribution, and their excitement to work with youth in order to positively influence their lives. This aligns with research in agricultural education that found working with young people and making a social contribution is a factor in the decision to teach agriculture (Hillison et al., 1987; Lawver & Torres, 2011; Lawver & Torres, 2012). Research outside of agricultural education has also produced similar findings (Kyraou & Coulthard, 2000; Lortie, 1975; Reid & Caudwell, 1997). The FIT-Choice® model (Watt & Richardson, 2007) described this factor as a *social utility value* in which individuals have a strong desire to make a social contribution, enhance social equity, positively influence the lives of youth, or give back to society. The opportunities provided to agriculture teachers to positively influence the lives of students should be highlighted to those who are exploring a career in agricultural education. Agriculture teacher educators must be honest with students about the challenges of the profession but also remind them of the benefits including the potential impact on next generation, opportunities for a good lifestyle, and opportunities to fulfill personal goals and values. This can be accomplished by sharing examples and by inviting current teachers to serve as guest speakers highlighting the positive aspects of the profession. These practices should also be included in teacher induction programs to help in-service teachers maintain their focus on why they chose the profession, even though at times it is challenging and discouraging.

Participants expressed a passion for agriculture and a desire to share that passion with others. Several participants mentioned a desire to be an advocate for agriculture through teaching. Vincent et al. (2012) found students of color were motivated to choose agricultural education as a major for similar reasons. Interestingly, participants did not express as much of a passion for teaching as they did about agriculture (Harms & Knobloch, 2005; Lawver & Torres, 2011; Lawver & Torres, 2012). Perhaps this is because the participants had limited experiences in teaching but many more experiences with agriculture. An intrinsic passion for agriculture is congruent with the *intrinsic value* component of the FIT-Choice® model (Watt & Richardson, 2007). Because these students enjoy the subject matter in agriculture and enjoy being a part of the agricultural industry, they are intrinsically motivated to be involved with it as a career.

The realization that teaching agriculture aligned with participants' personal values, particularly related to lifestyle, family, and hobbies, emerged as a factor influencing the decision to teach agriculture. The FIT-Choice® model (Watt & Richardson, 2007) described this factor as a *personal utility value* in which individuals find value in job security, time for family, and job transferability. Participants in this study primarily indicated concern about time for family and personal interests and hobbies. Not consistent with other studies in agricultural education (Lawver & Torres, 2011), job security and job transferability were not mentioned by the participants. These students decided to teach agriculture because they saw modeled by their agriculture teachers that they could have time for family and hobbies while teaching, not because of job security. Family time and hobbies are potentially important values to many students and should be highlighted as a benefit of being an agriculture teacher.

Participants' own experiences in agricultural education changed their perceptions about teaching agriculture and were identified as key factors in career decision. These findings are supported in the agricultural education literature (Arrington, 1985; Cole, 1984; Edwards & Briers, 2001; Hillison et al., 1987). The influence of prior teaching and learning experiences aligns with the *socialization influences* component of the FIT-Choice® framework (Watt & Richardson, 2007). Further, these prior experiences in agricultural education helped shape the participants' *self-perception* or self-efficacy of their ability to teach agriculture. Park and Rudd (2005) found program quality was key to recruiting students. Therefore, agriculture teachers should try to develop programs that are well-rounded and give students a variety of opportunities. Our findings support this idea because participants spoke about the influence of out-of-school FFA events, post high school opportunities that were available to them, and personal development through participation in various FFA activities on their career decision. It is especially crucial to get as many students to district, state, and national FFA events, as these were identified as catalysts and key moments in participants' motivation to select agricultural education as a career. Additionally, we recommend agriculture teachers, state staff, and agriculture teacher educators provide post-high school opportunities connected to agricultural education. These opportunities might include working in schools as a paraprofessional in agricultural education or volunteering to help prepare students for competitive events.

Involvement in agricultural education programs influenced the other themes identified. Examples of this include: (a) putting them in contact with key individuals who encouraged them to become agriculture teachers; (b) making them self-aware of the positive impacts agricultural education had on their lives; (c) teaching them the value of service towards others; (d) helping them develop a deep-rooted passion for agriculture; and (e) helping them see how being an agriculture teacher aligns with their own personal values and goals and could be a worthwhile and rewarding profession to pursue. State and national FFA leaders are encouraged to add components to state and national conventions that encourage students to consider agricultural education as a career. Activities might include workshops to encourage teaching as a profession or an agricultural education career development event. These opportunities can help students experience positive aspects of agricultural education teaching as a career and can show how the career may align with their personal values and goals. We recommend resources from the National Teach Ag Campaign (e.g., STAR grants) be utilized by state and national leaders in their efforts to develop workshops and other activities for students.

Some components of the FIT-Choice® model were not discussed by the participants in this study, including *task perceptions* (e.g., task demand and task return) related to teaching agriculture. Although agricultural education is a demanding and highly technical field, this area was not mentioned as a reason participants chose to pursue agricultural education. Social status and salary were not mentioned as reasons for choosing agricultural education as a career. Disparately, other

studies in agricultural education have found that the perception of financial stability and status as an agriculture teacher are significant factors for selecting agricultural education as a major (Hayes, 1990; Lawver & Torres, 2012; Vincent et al., 2005). The selection of agricultural education as a *fallback career* was mentioned by participants, and the fact that three of the participants changed their major from something else to agricultural education further substantiates this factor (Lawver & Torres, 2012). However, it did not emerge as a central theme.

Using the findings and conclusions of this study, and based on the FIT-Choice® model (Watt & Richardson, 2007) a conceptual model for factors influencing agricultural education students’ choice to pursue a career in agricultural education has been developed (see Figure 1). This model is similar to the Ag Ed FIT-Choice model (Lawver, 2009; Lawver & Torres, 2012), however, this model captures specific components of school-based agricultural education that influenced the participants in this study to choose to pursue a career in agricultural education. Those specific factors of school-based agricultural education are absent in the previous Ag Ed FIT-Choice® model. Therefore, to increase generalizability, we recommend further research, including replication of this study in other states and regions, exploring *how* school-based agricultural education programs influence preservice teachers’ choice to teach agriculture.

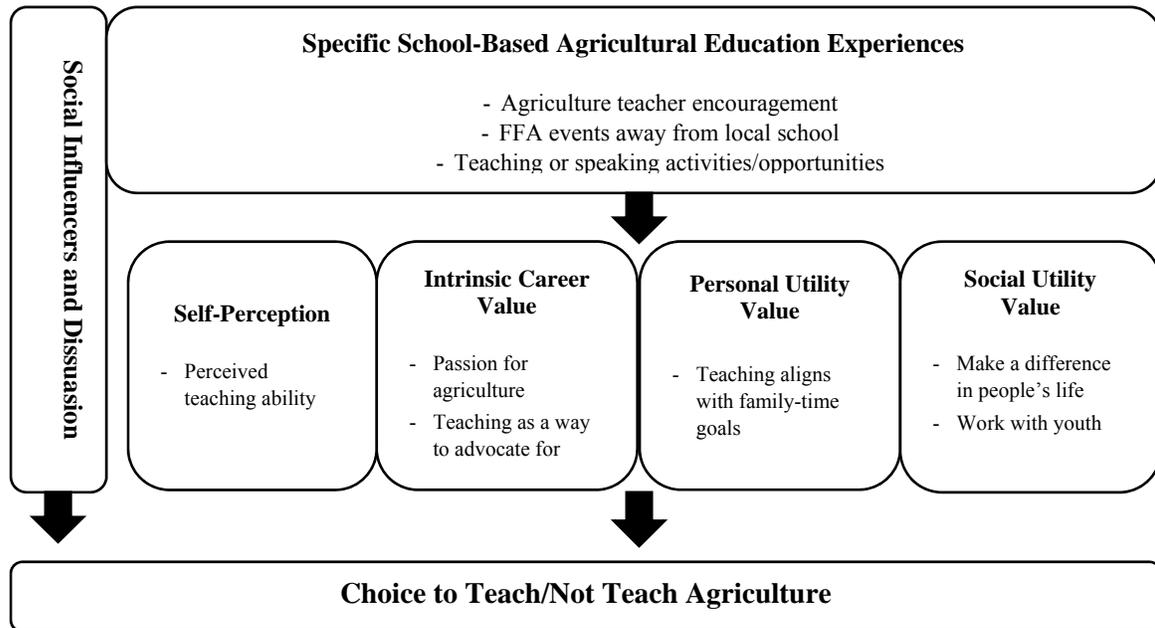


Figure 1. Conceptual model for career choice in agricultural education, based on findings of this study and adapted from the Ag Ed FIT-Choice® model (Lawver, 2009; Lawver & Torres, 2012).

We also recommend additional research be conducted on the influence of SAE programs in the decision to teach agriculture. While the SAE program was not identified as a theme directly influencing the career decision, it did seem at least secondarily related as part of the complete program of agricultural education. Perhaps SAEs have more of an influence on students’ choices of other agricultural careers than they do agricultural teaching. We further recommend that additional studies be conducted that include students from more diverse backgrounds (Lawver & Torres, 2012; Marx et al., 2017). The participants in this study all had backgrounds in rural or suburban school-based agricultural programs and were all FFA members. What influences students who come from more urban schools or students with little agricultural education background to

choose agricultural education as a career? These are pertinent questions if agricultural education is to be more representative of the population and able to serve a more diverse student population with less traditional background in agriculture.

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