Teacher Longevity and Career Satisfaction in the Secondary Agricultural Education Classroom

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Abstract

This study investigated the characteristics and rationale for teacher longevity and success in the secondary agricultural education classroom. The population was 7,300 (N = 7,300) secondary agricultural education teachers in the United States instructing grades 6-12 during 2017-2018. The sample frame was obtained through the National Association of Agriculture Educators membership list and a random sample (n = 187) of the population was selected using the Cochran's (1977) formula for continuous variables. The instrument used to collect data for this study was developed from a review of existing literature and consisted of 80 statements organized in four categories: influencers for career choice, employer characteristics, role of the FFA Advisor and FFA involvement, personal characteristics and professional growth, and personal characteristic questions. Participants who identified the overall characteristics which reflect their classroom longevity and success were feeling secure in their employment, developing their program, high satisfaction levels received from teaching and the variety of the lessons, and indicated former teachers having the greatest influence on their decision to pursue secondary agricultural education. The findings indicated that there are significant areas of success that should be investigated and revisited to determine the motivation for teachers to remain in the field.

Keywords: agriculture; education; success; longevity; employment; FFA; Advisor; lessons; retention

Introduction

Agricultural education teachers who have been successful in the classroom for a number of years serve as models for future teachers. Understanding the characteristics of these successful teachers and how they navigate the evolving phases of their careers can serve as new model for teacher matriculation and retention. Highlighting this role, Park and Rudd (2005) questioned "how does one agriscience teacher of 35 years produce four agriscience teachers while other agriculture programs with similar degrees of programmatic success produce none" (p. 82)? To ascertain the characteristics of successful agricultural education teachers we need to understand the rationale for career choice, the level of support within their school culture, how the FFA influences classroom longevity, and how teachers balance professional and personal responsibilities.

Agricultural education teacher shortages create negative consequences on secondary agricultural education programs and student learning nationwide. Edwards and Briers (2001) supported the negative consequences and associated problems with teacher attrition specifically within agricultural education. Each year 6.3% of agricultural education (Kantrovich, 2010) teachers leave the profession, retire, or relocate (Wirt, et al., 2005) while 25.0% fail to enter the secondary classroom from post-secondary institutions (Blackburn & Robinson, 2008). The historical shortage

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of agricultural educators in the United States is well documented and investigated (Hasselquist, Herndon, & Kitchel, 2017; Kantrovich, 2007). The historical accounting practices of agricultural education teachers and the shortages experienced has been investigated since secondary agricultural education programs began (Kantovich, 2010). Marx, Smith, Smalley, and Miller (2017) reported historical concerns of teacher shortages since 1921 and the 2013 National Council for Agricultural Education reiterated this need: "Recruitment and Retention of Teachers for School Based Agricultural Education" (Lemons, Brashears, Burris, Meyers, & Price, 2015, p. 17). Teacher shortages have a devastating effect on the education of students and adult learners who desire education in the agricultural sciences and the stability of secondary agricultural education programs nationwide.

The overwhelming evidence of teacher attrition and disengagement in our field has been a wake-up call for academic and professional organizations involved with teacher retention, training, and support. Crutchfield, Ritz, and Burris (2013) reported "job satisfaction, burnout, school climate and cultural influences, and workload contribute to teacher attrition" (p. 1), and Perie and Baker (1997) support these findings. The inclusion of administrative support has also been related to teacher retention or attrition. Smith and Meyers (2012) citing Voorhis and Sheldon (2004) reported administrators as a "critical force in creating and maintaining strong schools" (p. 56). Greenhaw, Brashears, Burris, Meyers, and Morrison (2017) found no current or past studies have investigated agricultural education teacher attrition from former agricultural educators while Kantrovich (2010) identified 660 of the 10,600 secondary agricultural education programs required replacements in 2009.

Agricultural education has identified vast reasons professionals leave (Chenevey, Ewing, & Whittington, 2014). Rice, LaVergne, and Gartin (2011) investigated why teachers remain, and as a result of their investment achieve success in the classroom. The longevity of successful agricultural educators cannot be measured only by traditional characteristics defining core academic teachers. A positive inquiry approach is needed to determine the longevity of variables unique to the discipline of agricultural education (Lemons, et al., 2015) to replicate teacher success as a potential model for younger and less experienced educators. Calvin and Pense (2013) identified potential barriers practicing teachers experience when recruiting students into our profession and consequently, their findings mirror the characteristics of why practicing teachers leave the profession. Community involvement, adult education, FFA program development, and classroom and laboratory responsibilities represent a small number of expectations of the agricultural educator. Successful and veteran teachers navigate these variables through experience and resilience cultivating longevity in the field while improving their understanding of agriculture through professional development seminars (Garton & Chung, 1996; Telljohann, Everett, Durgin, & Price, 1996).

Thieman, Henry, and Kitchel (2012) reported resiliency as a measure of success by the means teachers use to manage and balance their professional relationships. McKim, Sorenson, Velez, and Henderson (2017) stated that young teachers have a "youthful exuberance, and perhaps and excitement to the profession" (p. 9). Keigher (2010) further reported that 25% of teachers entering public schools leave the profession in the first three years. The contradiction between McKim, et al. (2017) and Keigher (2010) suggests that a knowledge "gap" may exist between youthful exuberance and attrition, longevity of successful teachers, and the reasons veterans remain teaching.

Prior research has demonstrated that measuring career satisfaction using the outcomes of the agricultural education program and the FFA have been both a promotor and a detractor. Hainline, Ulmer, Ritz, Burris, and Gibson (2015) reported the balance between home and

professional life may be representative of high attrition and low longevity rates in the agricultural education classroom. Responsibilities focusing on the classroom and the community, time, and commitments away from family are strongly associated with teacher attrition and performance.

The traditional characteristics represent an approach to measuring classroom success and longevity while not addressing non-traditional attributes that have a positive impact on teacher success. The United States worker averages 47 hours per week of employment (Weiss, 2014). Agricultural education teachers, however, complete an average of 57 hours per week (Murray, Flowers, Croom, & Wilson, 2011). Research has continuously demonstrated teacher attrition because of unattainable goals in teaching and the FFA, time commitments, and family involvement (Boone & Boone, 2009; Cano & Miller, 1992; Chenevey, et al. 2008; Delnero & Montgomery, 2001). Many studies have reported the reasons and rationale for teacher attrition or burnout that have cultivated in retention strategies (Clark, Kelsey, & Brown, 2014) where this study investigated the reasons teachers have remained. Understanding the characteristics of successful teachers and how they navigate the evolving phases of their careers can serve as new model for teacher matriculation and retention.

Conceptual Framework

Teacher retention and success is reflective of individual professional and personal experiences and how these behaviors were perceived. Weiner (1972) conceptualized Attribution Theory as an assumption of why people make the choices and actions that lead to an event or behavior. Attribution Theory (Weiner, 1972) served as the conceptual framework for this study and was bound using Wiener's (1972) three-stage process: 1) behavior must be observed or perceived; 2) behavior must be determined to be intentional; and 3) behavior should be attributed to internal or external causes. Each process supports successful habits and classroom longevity of secondary agricultural education teachers and provides context for teacher choices and experiences. If classroom success and longevity are to be viewed as the summation of lifetime experiences, then a thoughtful understanding of teacher effort and choice should be just as meaningful. Schunk (2008) reported that attributions are the "perceived causes of outcomes" (p. 455). Knowing that teachers make professional and personal decisions based on experience, education, family, and career needs, understanding the rationale for these decisions is paramount for teacher retention and success. Heider (1958) cited by Weiner (1972) distinguished behavioral choice as a means of two determinants: "can: the characteristics of the individual including intelligence and ability and try: determined by the momentary intentions and effort expenditure of the individual" (p. 204). The need to investigate successful teachers' attributes such as intelligence, ability, effort, and expenditure are well represented in our field. Blackburn, et al. (2017) reported that two assumptions can be aligned to Attribution Theory: 1) motivational goals exist within individuals who seek to master themselves and the environment; and 2) the comprehension of others behavior and the associated causes. These findings reinforce Heider's (1958) assumptions of can and try by supporting attributes inherent to successful teachers: intelligence, ability, effort and expenditure. The purpose of this research study alights closely with research priority three of the American Association of Agriculture Education's research area, question two: "what methods, models, and practices are effective in recruiting agricultural leadership, education, and communication practitioners (teachers, extension agents, etc.) and supporting their success at all stages of their careers" (Stripling & Ricketts, 2016, p. 31). This study addressed characteristics beyond the traditional role of the teacher through employer characteristics, FFA program and advisor duties, and personal characteristics of the agricultural educator and sought to identify non-traditional variables accounting for longevity and success.

Purpose and Objectives

This study investigated the characteristics and rationale for teacher longevity and success in the secondary agricultural education classroom. The objectives of this study were: 1) personal influence for choosing a career in agricultural education; 2) describe the characteristics of the employer and school system which positively impact professional longevity; 3) determine teacher involvement with the FFA and the how those responsibilities positively affect teaching retention; and 4) identify how characteristics of teacher's personal responsibilities to family and student success positively impact their career.

Methods

A nationwide study was conducted to understand why teachers have remained in the classroom. The population consisted of (N = 7,300) potential study participants from the United States instructing grades 6-12 during the 2017-2018 school year. The frame for this study was obtained through the National Association of Agriculture Educators membership list. Lindner, Murphy, and Briers (2001) reported paid membership lists may fail to contain all of the subjects in the population; therefore, a review panel of agricultural education experts evaluated the membership roster for accuracy and appropriateness. A representative sample size (n = 187) of the population was determined using Cochran's (1977) formula. This formula takes consideration of an acceptable margin of error and *alpha* set *a priori* of .05. This study is a component of a larger investigation focusing on attitudes and behaviors of successful secondary agriscience teachers.

The instrument used to collect data for this study was based on the review of existing literature (Boone & Boone, 2009; Cano & Miller, 1992; Chenevey, et al, 2008; Delnero & Montgomery, 2001; Hasselquist, et al, 2017; Kantrovich, 2007;) and consisted of 80 statements organized in four categories: a) influencers for career choice, b) employer characteristics, c) role of the FFA Advisor and FFA involvement, personal characteristics and d) professional growth and personal characteristic questions. Attribution Theory framed the design of the research instrument and was structured using the research objectives of this study. During instrumentation design the organization of the survey was focused on the choices agriscience teachers have made and how those choices affected their decisions to remain in the classroom. Central to the focus of the instrument was the perception of the behaviors initiated and reflected upon by interactions with administration, managing the agriscience education program, and how family responsibilities intersect professional and personal responsibilities.

A pilot study was conducted with a representative group of participants for content and face validity (Lindner, et al., 2001). The pilot study was vital for managing measurement error to ensure that the statements and questions were appropriate for the objectives under investigation (Dillman, Smyth, & Christian, 2014). The pilot review panel consisted of 15 secondary agriscience teachers in Alabama, Illinois and Georgia representative of the population being investigated. Dillman, et al. (2014) reported the use of pilot surveys in digital environments provides the opportunity to evaluate the entire survey process and incorporate improvements. The pilot study addressed the following variables: level of syntax difficulty and sentence structure, time of completion, level of appropriateness of the statements/questions, organization and ease of use in the Qualtrics software program, and mobile technology environments. Pilot study participants suggested minimal changes to the syntax of the instrument and included: expanding gender options in personal characteristics and providing a completion time indicator during the survey. Chronbach's alpha was calculated for each of the four categories and indicated high reliability for career influencer ($\alpha = .88$), employer or school systems ($\alpha = .86$), teacher involvement with the FFA ($\alpha = .89$), and personal characteristics of the teacher ($\alpha = .72$).

Study participants were contacted using Qualtric's survey software with a unique link to the online survey with a response of 47 respondents (n = 47). Dillman, et al. (2014) supports the use of survey-based software programs for improved design, data control, access, reporting, and cost. The Qualtric's instrument did not possess an incentive for participation. Two email reminders were sent to non-respondents at one and two-week intervals with 32 (n = 32) and 9 (n = 9) additional respondents, respectively. The Qualtrics based survey yielded a total of 87 responses (47.0%), well below the sample size determined through Cochran's analysis (n = 187).

A new sample set (N = 90) was randomly generated independent of the Qualtrics participant database and returned 67 (n = 67). A mail-based survey was used to compliment and improve the online response rate and consisted of the following items: paper-based instrument, personalized information letter, postage paid return envelope, and a token incentive. Dillman et al. (2014) reported that properly formatted surveys improve presentation and ease of use by respondents. Personalization of the information letter established authenticity of the surveying institution, the instrument, and credibility to improve the response rate (Dillman, et al., 2014). The use of a stamped, return envelope encouraged trust, reduced potential cost to the respondent, and represented the survey as something of value (Dillman, et al., 2014). A token incentive (mobile phone charger) was used to address non-response bias by "pulling in respondents who otherwise might not answer the questions" (Dillman, et al., 2014, p. 368). The instrument contained three visual symbols of a mobile phone being charged and how long participants' mobile device had been charging. Time prompts and charging graphics were provided at the beginning of each category at three and seven minutes, respectively, indicating completion time of the participant. This strategy was dualistic in design; remind participants of the incentive they accepted for participation and the time invested in the survey. Dillman, et al., (2014) supports the use of graphics for directing participant action and quickly assigning meaning to the graphic as an indicator of progress or action. A follow-up reminder was sent to the participants at two-weeks and a final thank you letter was mailed at the completion of the investigation. To control for nonresponse error, a comparison of early and late respondents using randomly selected variables was conducted using an independent t-test (Lindner, et al., 2001). The results indicated no statistical significance between early and late respondents. Descriptive statistical analysis was used to analyze the data and was consistent with the methods used by Blackburn, Bunch, and Haynes (2017).

Findings

The results of this study are presented in table summary and represent the analysis of groups influencing participant decision to teach agricultural education, demographic characteristics, characteristics of the employer, FFA/advisor characteristics, and professional experience and personal growth. The instrument contained a total of 80 statements in each of the four categories listed above. The statements were organized into categories based on the type of statement being investigated. These findings correspond to the research instrument and provide a rational and logical format for the analysis and dissemination of the data.

Influence for Career Choice

Research participants were asked to indicate the greatest influence on their decision to pursue agricultural education as a career. Participants (n = 101) indicated that former teachers (43.40%) had the greatest level of influence (Table 1) on their personal decision to study agricultural education compared to 29.50% of family influencing their decision, and 5.40% of friends promoting agricultural education as a career.

Table 1

Groups Influencing Participants' Decision to Pursue Teaching

Teaching Influencer	f	%
Which group most influenced your		
decision to become a teacher?		
1. Teachers	56	43.40
2. Family	38	29.50
3. Friends	7	5.40
Total	101	78.30

Note. n = 101 due to item nonresponse

Personal characteristics (Table 2) of the participants (n = 121) were collected to better understand the demographics of the study respondents. The participants ranged in age from 24-75 years old with 35-44-year-old respondents composing the largest age demographic (f = 34, 26.40%) and were predominately white (f = 106, 82.20%). Participants were largely male (f = 64, 49.60%) while female respondents represented the second largest group (f = 52, 40.30%) of the participant sample. Participants reported an average of 6-10 years teaching (f = 32, 24.80) secondary agricultural education.

Table 2

Personal Characteristics	f	%
Age		
35-44 years old	34	26.40
55-64 years old	33	25.60
45-54 years old	28	21.70
65-74 years old	14	10.90
25-34 years old	8	6.20
18-24 years old	3	2.30
>75 years	1	0.80
- 7	Total 121	100.00%
Ethnicity origin (or race)		
White	106	82.20
Hispanic or Latino	10	7.80
Black or African American	1	0.80
Native American	1	0.80
Asian/Pacific Islander	1	0.80
Other	1	0.80
]	Total 121	100.00%
Gender		
Male	64	49.60
Female	52	40.30
Other	4	3.10

Personal Characteristics of Participants

Prefer not to say		1	0.80
Transgender		0	0.00
-	Total	121	100.00%
Number of years teaching			
6-10 years		32	24.80
16-20 years		18	14.00
11-15 years		14	10.90
21-25 years		14	10.90
26-30 years		13	10.10
31-35 years		10	7.80
36-40 years		9	7.00
1-5 years		6	4.70
41-45 years		4	3.10
>46 years		1	.80
< one year		0	0.00
	Total	121	100.00%

Note. n=121 due to item nonresponse

Employer Characteristics

Participants indicated their level of agreement related to how employer characteristics influenced their decision to remain in the agricultural education classroom. An interval scale measure was used to determine the impact of each statement and participants indicated their agreement with each question or statement. This section contained 21 questions/statement related to their perceptions and feelings related to employer support, curriculum choices, job security, and contractual expectations. The participants (n = 126) reported that (Table 3) feeling secure in their employment was important for remaining in the classroom (M = 1.67, SD = .67) was the most important factor for their longevity and success. Reliable administrative support (M = 1.68, SD = .85) and employee health benefits (M = 1.69, SD = .74) shared relatively close mean values. Participants also indicated the freedom to determine their own curriculum (M = 1.72, SD = .76) and an extended contract for salary purposes (M = 1.88, SD = .91) were also important for their rationale for remaining in the agricultural classroom.

As shown in Table 3, the characteristics with the least impact for teacher longevity and success in the agricultural education classroom indicated that salary (M = 2.36, SD = .96) and salary within the district (M = 2.37, SD = .96) were not of major concerns for agricultural teachers' classroom longevity. Family participation in the community (M = 2.51, SD = .96) participation and use of social media (M = 3.20, SD = 1.10), activities outside of the agricultural education and FFA (M = 3.38. SD = 1.30) had limited impact for teacher longevity. Participants (N = 126) reported low impact of extracurricular activities (M = 3.75, SD = .90) related to teacher longevity.

Table 3

Employer Variables Related to Teacher Classroom Success and Longevity

Employer Variables Regarding Factors Related to Teachers Remaining in the	n	М	SD
Classroom			
Feeling secure in my employment is important for remaining in the classroom.	126	1.67	.67
Reliable administrative support is an important factor	126	1.68	.85
Employee health benefits are an important factor	126	1.69	.74
The freedom to determine my own curriculum is an important factor	126	1.72	.76
An extended contract (for salary purposes) is an important factor	126	1.88	.91
Employer contribution to retirement is important for remaining in the classroom.	126	1.90	.93
Being employed in a school in my ideal location is an important reason I am still teaching.	126	1.94	.92
Believing my thoughts, ideas, and feelings are valued by my peers and administrators is important.	126	1.96	.86
The administration listens to my needs and attempts to find solutions is important for remaining in the classroom.	126	1.98	.87
The social climate of my school is important for remaining in the classroom.	126	2.02	.85
Feeling like I am an important contributor to the vision and values of the school is an important factor	126	2.03	.92
The workplace climate of my school is an important reason I have remained teaching.	126	2.07	.91
How my administration understands the complexities of agricultural education is an important factor	126	2.08	1.0
Receiving an FFA stipend is an important factor	126	2.24	1.0
Having clear expectations of my performance from my administration is an important factor	126	2.24	.92
Salary is an important factor	126	2.36	.96
The salary in my district is an important factor	126	2.37	.96
Family involvement in the community is an important factor	126	2.51	.96
The use of social media (Ag Ed Discussion Group on Facebook) is an	126	3.20	1.10
important			
I am involved in school activities outside of agricultural education and the FFA (coaching, musicals, etc.) is an important factor	126	3.38	1.30
Having the opportunity for extracurricular supervision duties (ticket taking, sports supervising, etc.) is an important factor	126	3.75	.90

Role of the FFA Advisor and FFA Involvement

As shown in Table 4, participants were asked to evaluate each statement as they related to their role as an FFA advisor and their experiences, both past and present with the FFA organization as a determination of their success and longevity in the agricultural classroom. Mean scores and standards deviation were calculated to determine participants level of agreement. Participants (n = 123) rated each statement using to indicate the impact of each statement. The 25 statements focused on program development, managing time, collaboration with peers, and helping students achieve their programmatic and FFA goals. Respondents indicated that assisting students to attain their individual goals (M = 1.44, SD = .58) was the most important factor for remaining in the secondary

agricultural education classroom. Participants also stated that developing their program, attaining professional goals for the chapter (M = 1.70, SD = .70), managing their time as an FFA advisor (M = 1.70, SD = .71), and developing friendships with other advisors (M = 1.70, SD = .83) were highly influential in their success and longevity as an agricultural educator. Additionally, participants indicated that collaboration (M = 1.80, SD = .79) with other FFA advisors was a valuable characteristic for their success.

Data analysis indicated statements which had less influence on longevity and success as a means of teacher retention in the agricultural classroom. Participants (N = 123) indicated that assisting students to attain the state (M = 2.76, SD = 1.06) and American FFA Degree (M = 2.80, SD = 1.06) was not an overwhelming factor in their decision to remain in the classroom. Respondents neither agree nor disagree that local FFA Alumni support (M = 3.02, SD = 1.06) was a determining factor of their success and longevity. Participants indicated that being the advisor of a State (M = 3.20, SD = 1.01) or National FFA Officer (M = 3.50, SD = .91) was not a strong measure of their teaching success or years of service as an educator.

Table 4

FFA/Advisor Experience Variables by Teacher Classroom Success and Longevity

FFA Advisor Statements Regarding Factors Related to Teachers Remaining in	п	М	SD
the Classroom			
Assisting students to attain their individual goals is an important factor	123	1.44	.58
Developing my program and attaining professional goals for the chapter is an important factor	123	1.70	.70
Learning to manage my time as an FFA Advisor is an important factor of my remaining in teaching.	123	1.70	.71
The friendships I have developed with other advisors is a factor	123	1.70	.83
Collaborating with other FFA Advisors is an important factor	123	1.80	.79
Developing peer friendships with other FFA advisors is an important factor	123	1.80	.80
My past experience with the FFA is an important factor	123	1.86	1.00
Competition in the FFA energizes me and is an important factor	122	2.00	1.03
Training Career Development teams is an important factor	123	2.04	.90
Having students participate in Leadership Development teams is an important factor	123	2.10	.89
Attending State FFA Convention is an important factor	123	2.17	.92
Teaching students the history and culture of the FFA is an important factor	123	2.20	.88
Having two incomes (partner, spouse, etc.) is an important factor	120	2.20	1.18
Attending professional conferences with my peers is an important factor	121	2.20	1.00
Developing Supervised Agricultural Experience Programs (SAE) with my students is an important factor	123	2.37	.940
Attending National FFA Convention is an important factor	123	2.40	1.03
Assisting my students to attain the state FFA degree is an important factor	123	2.42	.980
Being a parent is a strong factor	121	2.50	1.18
Having assistance from an Advisory Committee is an important factor	123	2.70	1.00
Obtaining advanced degrees is an important factor	121	2.70	1.04
Assisting students to attain the American FFA degree is an important factor	123	2.76	1.06
Fundraising for the FFA program is an important factor	123	2.80	1.07

My local FFA Alumni support is an important factor	123 3.02	1.06
Being the advisor of a State FFA Officer is an important factor	123 3.20	1.01
Being the advisor of a National FFA Officer is an important factor	123 3.50	.91

Note. n = 120 due to item nonresponse

Personal Experiences and Professional Growth

As shown in Table 5, participants (n = 121) evaluated 19 statements related to their personal experiences and professional growth as an agricultural education teacher. Specific statements were provided to the participants focusing on enjoyment of agriculture and education, work value and interest, satisfaction of teaching, variety of curriculum, and continued support for becoming a teacher. Participants were asked their perceptions of enjoying agriculture and education as a factor of their remaining in the classroom (M = 1.30, SD = .51) and strongly agreed with the statement. Respondents further indicated they believe their work is interesting (M = 1.40, SD = .58)and have faith that they are making a difference (M = 1.40, SD = .56) in the lives of their students each day. Participants reported high satisfaction levels they receive from teaching (M = 1.50, SD = .58)and the variety of the lessons, activities, and events they experience each day as a factor of their remaining in the secondary classroom. Community support for teaching and the FFA program (M = 1.60, SD = .59) and the support of the teacher's family (M = 1.60, SD = .79) were strong indicators of longevity and success. Participants reported that finding satisfaction in the teaching and advising provided to students (M = 1.60, SD = .62) was a key to their success as an agricultural educator.

Table 5

Personal Experience and Professional Growth by Teacher Classroom Success and Longevity

Personal Experience and Professional Growth Factors Related to Teachers	n	M	SD
Remaining in the Classroom			
I truly enjoy agriculture and education that is an important factor	121	1.30	.51
I believe my work is interesting and is an important factor	121	1.40	.58
I believe and have faith that that I make a difference in the lives of my	121	1.40	.56
students each day and this has been an important factor			
The satisfaction I receive from teaching is an important factor	121	1.50	.58
The daily variety of lessons, activities, and events I experience as an	121	1.60	.62
agricultural education teacher are an important factor			
Community support for teaching and the FFA program is an important factor	121	1.60	.59
I have a supportive family which understands my career and is an important	121	1.60	.79
factor			
Finding satisfaction in the teaching and advising I provide to students has been	121	1.60	.61
an important factor			
Developing close friendships with other agricultural education teachers is an	121	1.80	.77
important factor			
My personal goals and vision for education is an important factor	121	1.80	.70
My partner/spouse/family has encouraged me to remain teaching and this has	121	2.10	1.02
been an important factor			
1			

I am able to blend my family and my career and this has been an important factor	121	2.20 .95
Parental support of my students is an important factor	121	2.20 .87
I still remain in contact with friends who completed their agricultural education coursework when I completed mine.	121	2.30 1.01
My teaching partner or another teacher has encouraged me to remain teaching and this has been an important factor	121	2.30 1.02
I have developed strategies to effectively manage the anxiety and stress associated with agricultural education which has been an important factor	121	2.40 .98
My being involved in the community (civic clubs, sports, church, etc.) is an important factor	121	2.50 1.01
Having two incomes (partner, spouse, etc.) is an important factor	121	2.60 1.30
Obtaining advanced degrees is an important factor	121	2.90 1.06
Note $y=121$ due to item nonnegations		

Note. n=121 due to item nonresponse

The analysis of the data identified statements that had less influence on the success of the teacher or their longevity in the secondary agricultural education classroom. Participants remaining in contact with friends completing their agricultural education coursework at the same time (M = 2.30, SD = 1.01) was less impactful while their teaching partner or other teachers' influence (M = 2.30, SD = 1.02) on the participants remaining in the secondary classroom was not a factor. Participants indicated that even though they had developed strategies to manage anxiety associated with agricultural education (M = 2.40, SD = .98) and their involvement with the community (M = 2.50, SD = 1.01) had less of an impact on their success. Participants also indicated that two incomes (M = 2.60, SD = 1.30) and obtaining advanced degrees (M = 2.90, SD = 1.06) were not as important for their remaining in the secondary agricultural education classroom. The findings of this study represent the population (N = 187) sample size (n = 126) regarding attitudes and perceptions representative of five categories.

All respondents are currently teaching agriculture at the middle or high school level and are members of the National Association of Agricultural Educators and have taught on average for 6-10 (24.80%) and 16-20 (14.00%) years. Participants indicated that 43.40% were most influenced by other teachers to pursue agricultural education as a career field. Participant demographics identified the greatest number of respondents were 35-44 (26.4%) and 55-65 (25.6%) years old and were predominately white (82.20%) and 49.60% male and 40.30% female, respectively. Analysis of the data was reported in four major categories: influencers for career choice, employer characteristics, role of the FFA Advisor and FFA involvement, personal characteristics and professional growth, and personal characteristic questions.

Conclusions, Implications, and Recommendations

The purpose of this descriptive study was to determine the positive characteristics of successful agricultural education teachers in the United States which influence their classroom longevity. A representative sample size (n = 187) was selected from the National Association of Agriculture Educators membership list. Questions and statements were organized within four areas: personal influence for career choice, employer characteristics, role of the FFA Advisor and FFA involvement, personal characteristics and professional growth, and personal characteristic questions.

The intent of objective one was to identify which positive influence (parents, friends, or educators) shaped their desire to teach agricultural education. The results indicated that educators had the largest influence when helping the participants determine their career path. This finding supports the literature that confirms the impact secondary agriscience teachers exert when discussing career and educational opportunities with students (Park & Rudd, 2005). The impact of practicing teachers on student career and educational choices is best described by the amount of time students spend with teachers developing supervised agricultural experience programs, CDE and LDE preparation, conferences, and other FFA activities (Calvin & Pense, 2013; Park & Rudd, 2005). The results of this objective reinforce the tenet that agricultural education teachers are best positioned to introduce, reinforce, and promote the opportunities available to potential agricultural education majors in secondary preparation programs. Edwards and Briers, (2001) reported that students with previous agriculture work experience and FFA involvement were linked to longer teaching careers; thus, the quality of student experiences in agricultural education courses and the longevity of the classroom teacher could serve as a good metric for predicting future agricultural educators. Professional agricultural education associations have recognized this potential and through collaboration with the Teach Ag initiative many states are conducting conferences for students that demonstrate interest in pursuing agricultural education after high school. The implications of these opportunities are reinforced through student attendance and continued development of the Agricultural Education Career Development Event.

Objective two sought to understand agricultural educators' perceptions of positive characteristics related to their employer and the school system in which they are employed. Participants indicated the need to feel secure in their employment was the most important factor for remaining in the agricultural education classroom. While the researchers acknowledge career satisfaction as a major component of remaining in education, this finding is limited in the depth of the specific characteristics related to employment security. Hasselquist, et al. (2017) supported the findings of this objective and reinforced the need for further exploration regarding the specific characteristic's accounting for teachers' job satisfaction. Litteral, Billingsley, and Cross (1994) also noted the importance of school support for teacher success but did not quantify their findings. As stated, the depth of meaning regarding employment security is limited within this study, although participants did elude to possible variables used when measuring their level of security. Participants identified reliable administrative support as a condition of their success and longevity. This finding is strongly supported within our field (Hasselquist, et al., 2017; Aschenbrener, Garton, & Ross, 2010; Boone & Boone, 2009) and the relationship teachers develop with supportive administration. Historical analysis of existing data indicated negative relationships with administration are a significant contributor to teacher dissatisfaction (Perie & Baker, 1997). The implications of these findings suggest that successful agriculture teacher may share similar characteristics with other respondent within the study when establishing positive and respectful administrative relationships. The assumption can be made that numerous variables exist for how teachers evaluate the positive support received from administration: availability, trust, willingness to participate and be present during agricultural education activities, support for professional organizations, etc. The specific dynamics of the agricultural educator and administrator in this study were not investigated. Further studies should be conducted to qualitatively investigate the relationship between agricultural educators and the characteristics supportive administrators. Further research could identify common characteristics between supportive administration and aid in the development of novice teachers approach to establishing positive professional relationships. The outcomes of potentially replicable strategies may address unknown variables adversely affecting teacher success and longevity.

Objective three addressed agriculture teachers' involvement with their local FFA chapter and the perception of positive experiences in the classroom. Participants indicated that assisting students to achieve their goals had the highest impact on their decision to remain in the classroom and overall happiness in their profession. Previous studies in agricultural education have addressed student success and activities as measure of job satisfaction for teachers. Smith and Myers (2012), citing Cheek, Arrington, Carter, & Randell (1994) reported student achievement in curriculum, Supervised Agricultural Experience (SAE) program, and aptitude in Career and Leadership Development Events as indicators of a successful agricultural education program and therefore a successful agricultural education teacher. The implications of student experience and success in FFA activities and the level of satisfaction experienced by agricultural education teachers may be dualistic in nature: the agricultural educator experiences intrinsic feelings of pride and success which extrapolate into positive experiences for students. Further studies should investigate how individual student success impacts the FFA advisor's role in chapter growth, development, and success.

Objective four addressed characteristics related to the teachers' personal responsibilities related to finding balance and harmony within the profession. Participants indicated their enjoyment of agriculture and the opportunity to blend their passion with educating students. Secondary agricultural education teachers indicated that passion for agriculture as a field of study and their desire to teach students was grounded in the belief that they are making a difference in the lives of their students and ultimately fulfilling the needs of agricultural employment. This finding supports the need for continued learning for agricultural educators through professional development opportunities. Opportunities for expanding teacher's knowledge of agriculture improves their effectiveness (Garton & Chung, 1996) and improves classroom instruction (Telljohann, et al., 1996).

Findings and conclusions obtained from this study provide opportunities for agricultural educators, administrators, and professional organizations to review current practices for teacher retention. In order to replicate the success of veteran teachers' programmatic reviews should be undertaken to identify the specific characteristics that account for classroom longevity. These findings could be integrated into professional development opportunities for novice teachers while utilizing the success of veteran teachers' experiences. The dualistic role between administration and agricultural educators should be further investigated to ascertain the specific characteristics and how positive relationships are fostered. This study would benefit from a more in-depth qualitative research study to determine the specific rationale for the collected data. This study should continue to investigate how employment security, student success, and a love of agricultural science are interconnected. Finally, this study would benefit from conducting a factorial analysis of the instrument and would be beneficial to determine a statistically appropriate grouping of the questions and statements presented to the participants.

References

- Aschenbrener, M. S., Garton, B. L., & Ross, A. L. (2010). Early career agriculture teachers' efficacy toward teaching students with special needs. *Journal of Agricultural Education*. 51(4), 105-117. doi:10.5032/jae.2010.04105
- Blackburn, J. J., Bunch, J. C., & Haynes, J. C. (2017). Assessing the relationship of teacher selfefficacy, job satisfaction, and perception of work-life balance of Louisiana agriculture teachers. *Journal of Agricultural Education*, 58(1), 14-15 doi.org/10.5032/jae.2017.01014

- Blackburn, J. J., & Robinson, J. S. (2008). Assessing teacher self-efficacy and job satisfaction of early career agriculture teachers in Kentucky. *Journal of Agricultural Education*, 49(3), 1-11. doi: 10.5032/jae/2008.03001
- Boone, Jr., H.N., & Boone, D. A. (2009). An assessment of problems faced by high school agricultural education teachers. *Journal of Agricultural Education*, 50(1), 21-32. doi: 10.5032/jae.2009.01021
- Calvin, J., & Pense, S. L. (2013). Barriers and solutions to recruitment strategies of students into post-secondary agricultural education programs: A focus group approach. *Journal of Agricultural Education*, 54(4), 45-57. doi:10.5032/jae.2013.04045
- Chenevey, J. L., Ewing, J. C., & Whittington, M. S. (2008). Teacher burnout and job satisfaction among agricultural education teachers. *Journal of Agricultural Education*, 49(3), 12-22. doi: 10.5032/jae.2008.03012
- Cheek, J. G., Arrington, L. R., Carter, S., & Randell, R. S. (1994). Relationship of supervised agricultural experience program participation and student achievement in agricultural education. *Journal of Agricultural Education*, *35*(2), 1-5. doi:10.5032/jae.1994.02001
- Clark, M. S., Kelsey, K. D., & Brown, N. R. (2014). The thornless rose: A phenomenological look at decisions career teachers make to remain in the profession. *Journal of Agricultural Education*, 55(3), 43-56. doi: 10.5032/jae.2014.03043
- Crutchfield, N., Ritz, R., & Burris, S. (2013). Why agricultural educators remain in the classroom. *Journal of Agricultural Education*, 54(2), 1-14. doi: 10.5032/jae.2013.02001
- Delnero, J., & Montgomery, D. (2001). Perceptions of work among California agriculture teachers. *Journal of Agricultural Education*, 42(2), 56-67.doi: 10.5032/jae.2001.02056
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed mode surveys: The tailored design method (4th ed.).* Hoboken, NJ, US: John Wiley & Sons Inc.
- Edwards, C. M., & Briers, G. E. (2001). Selected variables related to expected longevity in teaching on entry-phase agriculture teachers. *Journal of Career and Technical Education, 18*(1). Retrieved from: https://ejournals.lib.vt.edu/JCTE/article/view/595/847
- Garton, B. L., & Chung, N. (1996). The inservice needs of beginning teachers of agriculture as perceived by beginning teachers, teacher educators, and state supervisors. *Journal of Agricultural Education*, 37(3), 52-58. doi: 10.5032/jae.1996.03052
- Greenhaw, L. L., Brashears, M. T., Burris, S., Meyers, C., & Morrison, C. C. (2017). Preliminary development of an attrition risk assessment instrument for secondary agricultural educators. *Journal of Agricultural Education*, 58(2), 83-97. doi.org/10.5032/jae.2017.0208
- Hasselquist, L., Herndon, K., & Kitchel, T. (2017). School culture's influence on beginning agriculture teachers' job satisfaction and teacher self-efficacy. *Journal of Agricultural Education*, 58(1), 267-279. doi.org/10.5032/jae.2017.01267

Hainline, M. S., Ulmer, J.D., Ritz, R. R., Burris, S., & Gibson, C. D. (2015). Career and family balance of Texas agricultural science teachers by gender. *Journal of Agricultural Education*. 56(4). 31-46. doi:10.5032/jae.2015.04031

Heider, F. The psychology of interpersonal relations. New York: Wiley, 1958.

- Kantrovich, A. J. (2007). A national study of supply and demand for teachers of agricultural education from 2004-2006. Morehead, KY: *American Association of Agricultural Education*. Retrieved from https://www.naae.org/teachag/2007%20Supply%20Demand%20Study%20.pdf
- Kantrovich, A. J. (2010). *The 36th volume of a national study of the supply and demand for teachers of agricultural education from 2006-2009*. American Association of Agricultural Educators. West Olive, MI: Michigan State University. Retrieved from https://www.naae.org/teachag/2010%20AAAE%20Supply%20Demand%20Study.pdf
- Keigher, A. (2010). Teacher attrition and mobility: Results from the 2008-09 teacher follow-up survey (NCES 2010-353). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubsearch
- Lemons, L. L., Brashears, T. M., Burris, S., Meyers, C., & Price, M. A. (2015). Factors contributing to attrition as reported by leavers of secondary agriculture programs. *Journal* of Agricultural Education. 56(4). 17-30. doi:10.5032/jae.2015.04017
- Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education*, 42(4), 43-53. doi:10.5032/jae.2001.04043
- Littrell, P., Billingsley, B., & Cross, L. (1994). The effects of support on general and special educators' stress, job satisfaction, health, school commitment and intent to stay in teaching. *Remedial and Special Education*, *15*(5), 297-310. Retrieved from: https://journals.sagepub.com/doi/pdf/10.1177/074193259401500505
- Marx, A. A., Smith, A. R., Smalley, S. W., & Miller, C. (2017). Previous experience not required: Contextualizing the choice to teach school-based agricultural education. *Journal of Agricultural Education*, 58(4), 126-142. doi.org/10.5032/jae.2017.04126
- McKim, A. J. & Velez, J. J. (2015). Exploring the relationship between self-efficacy and career commitment among early career agriculture teachers. *Journal of Agricultural Education*, 56(1), 127-140. doi: 10.5032/jae.2015.01127
- MetLife (2015). *Work redefined: A new age of benefits*. Retrieved from https://benefittrends.metlife.com/media/1382/2017-ebts-report_0320_exp0518_v2.pdf
- Murray, K. A., Flowers, J. L., Croom, D. B., & Wilson, E. B. (2011). The agricultural teacher's struggle for balance between career and family. *Journal of Agricultural Education*, 52(2). doi:10.5032/jae.2011.02107
- Park, T. D., & Rudd, R. (2005). A description of the characteristics attributed to students' decisions to teach agriscience. *Journal of Agricultural Education*, 46(3), 82-94. doi:10.5032/jae.2005.03082

- Perie, M., & Baker, D. P. (1997). Job satisfaction among America's teachers: Effects of workplace conditions, background characteristics, and teacher compensation.
 Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement. Retrieved from: https://nces.ed.gov/pubs97/97471.pdf
- Schunk, D. H. (2008). *Learning theories: An educational perspective*. Columbus, OH: Pearson-Merrill Prentice Hall.
- Smith, A. G., & Myers, B. E. (2012). Perceptions of Florida secondary school principals toward agricultural education. *Journal of Agricultural Education*, 53(3), 154-165. doi: 10.5032/jae.2012.03154
- Stripling, C. T., & Ricketts, J. C. (2016). Sufficient scientific and professional workforce that addresses the challenges of the 21st century. In T. G. Roberts, A. Harder, & M. T. Brashears (Ed.S.). (2016). American Association for Agricultural Education national research agenda: 2016-2020 (pp. 40-49). Gainesville, FL: Department of Agricultural Education and Communication.
- Telljohann, S. K., Everett, S. A., Durgin, J., & Price, J. H. (1996). Effects of an inservice workshop on the health teaching self-efficacy of elementary school teachers. *The Journal* of School Health, 66, 261-265. doi:10.1111/j.1746-1561.1996.tb06282.x
- Thieman, E. B., Henry, A. L., & Kitchel, T. (2012). Resilient agricultural educators: Taking stress to next level. *Journal of Agricultural Education*, 53(1), 81–94. doi:10.5032/ jae.2012.01081
- Voorhis, F. V. & Sheldon, S. (2004). Principals' roles in the development of US programs of school, family, and community partnerships. *International Journal of Educational Research*, 41, 55-50. doi:10.1016/j.ijer.2005.04.005
- Weiner, B. (1972). Attribution theory, achievement motivation, and the educational process. *Review of Educational Research*, 42(2), 203–215. Retrieved from www.jstor.org/stable/1170017
- Weiss, G. (2014). *The average American works 47 hours per week, gallup finds*. Retrieved from http://www.entrepreneur.com/article/237075
- Wirt, J., Choy, S., Rooney, P., Hussar, W., Provasnik, S., Hampden-Thompson, G. (2005). *The condition of education, 2005.* NCES 2005-094 Distributed by ERIC Clearinghouse.