

Factors Related to Teachers' Intention to Leave the Classroom Early

Abby Tippens
John C. Ricketts
A. Christian Morgan
Maria Navarro
Frank B. Flanders
University of Georgia

The challenge of retaining teachers in the profession of agricultural education is a prevalent and growing problem in the United States. The purpose of this study was to determine the primary factors contributing to intention to leave the profession among Georgia agriculture teachers. Teacher-participants responded to a web-based survey which sought to determine the following: the demographics of Georgia agriculture teachers, self-perceived likelihood of leaving the profession, job satisfaction as it relates to working conditions, and contributing factors to self-perceived likelihood of leaving the profession. Respondents were generally satisfied with their jobs, and the majority of teachers planned to remain in the profession. Differences were identified between genders in the area of job satisfaction and self-perceived likelihood of leaving their current position. Teachers were most likely to leave the profession because of retirement, family, and commitments to children. Teachers were most dissatisfied because of burnout.

Priority 3 of the American Association of Agricultural Education (AAAE) National Research Agenda seeks research solutions to establish a “Sufficient Scientific and Professional Workforce That Addresses the Challenges of the 21st Century” (Doerfert, 2011, p. 9). To accomplish this requires teachers, but the teacher shortages in all educational disciplines, as well as in agricultural education, have reached a critical need point. Nearly 10 years ago, prior to the current teacher shortage crisis, 58% of schools reported difficulty in filling teacher positions (Ingersoll, 2003). In agricultural education, the shortage is well documented (Kantrovich, 2007), but studies exploring the impetus for this phenomenon are fewer in number. The teacher shortage issue forces many school systems to lower standards to fill teaching openings, thus creating higher levels of under qualified teachers and lower levels of school performance (Ingersoll, 2003). This overwhelming demand for teachers is caused primarily by turnover rather than increases in student enrollment or teacher retirement (Ingersoll, 2003), and no teacher supply strategy will work to supply our nation’s classrooms “if we do not reverse the debilitating

rate of teacher attrition” (*Unraveling the “Teacher Shortage,”* 2002, p. 3). Many of the vacant positions in agricultural education are caused by teacher attrition—those who decide to leave teaching for at least a one-year period.

Research has shown that many agriculture teachers are leaving the profession before retirement—especially within the first five years of teaching (Kantrovich, 2007). With the existence of a teacher shortage, extra emphasis should be placed on retention. Because of attrition, the gap of certified agriculture teachers needed to fill available agriculture positions continues to widen (Kantrovich, 2007). Attrition also creates an added cost for taxpayers and governments. For example, according to Afolabi, Nweke, Eads, and Stephens (2007), the cost to recruit, hire, and train teachers in Georgia who are lost to attrition was almost \$400 million annually.

Many studies look at recruitment of teachers to the profession, but in order to address the teacher shortage in agricultural education, one must look at why teachers are leaving the profession. When all corridors of education are combed, the major factors that contribute to attrition include: salary, retirement, family or per-

sonal reasons, pursuit of another job, and dissatisfaction with working conditions (Ingersoll, 2003). One could deduce that all of these reasons relate to one's overall satisfaction with the profession. Many studies have been conducted on agriculture teacher job satisfaction by surveying those still in the profession (Cano & Miller, 1992b; Castillo & Cano, 1999; Castillo, Conklin, & Cano, 1999; Thobega & Miller, 2003; Walker, Garton, & Kitchel, 2004), but few studies have inventoried job satisfaction and how it relates to one's intent to remain in the profession. If one can understand the primary causes of attrition and identify the primary contributors to job satisfaction, then the profession can address the problem of teacher attrition more thoroughly and objectively.

Literature Review and Conceptual/Theoretical Framework

The primary theory guiding this investigation was Grissmer and Kirby's (1987) Human Capital Theory, but Ingersoll's (2003) findings regarding reasons behind teacher shortages and attrition were also part of the guiding framework for this study. According to Grissmer and Kirby (1987), attrition is more likely in educators who are in their first few years of teaching and in teachers who are towards the end of their career; attrition is lowest among mid-career teachers. Teachers early in their career have less invested in the career, while teachers late in their career are nearing retirement and many become eligible for early retirement, thus increasing attrition rates (1987).

Grissmer and Kirby's theory postulates that as individuals remain in a job, they gain certain forms of monetary and non-monetary capital in the workplace, with monetary capital including incentives such as salary, health benefits, promotion opportunities, and retirement pensions, and non-monetary capital including items such as relationships with co-workers, working conditions, hours, family expectations, availability of equipment and materials, and the attitudes and behaviors of students (1987). The longer an individual remains in one occupation, the more capital (monetary and non-monetary) they acquire.

The reasons for attrition among general education teachers vary by age group, with younger teachers most likely to leave because of changes in family status or a move of residence. In fact, 46% of teachers leave the profession within the first five years of teaching (Ingersoll, 2003). Older teachers were most likely to leave late in their career due to early retirement benefits (Kirby & Grissmer, 1993).

The reasons for attrition vary when one compares those who permanently leave teaching with those who take a temporary break from the profession. Among those taking a break in teaching, pregnancy and childbearing accounted for 47.3% of those involved in an Indiana survey (Kirby & Grissmer, 1993). This is likely a trend in all states as well as within the specific teaching area of agricultural education. The second most likely cause for temporary attrition among those Indiana teachers was the opportunity to try another career. A change in geographic location has also been ranked high among early career educators (Kirby & Grissmer, 1993). Ingersoll (2003) confirmed these numbers by reporting that teacher departures relating to family or personal reasons – including pregnancy, raising of children, health issues, and family moves – accounted for 44% of teacher turnover.

Again, Human Capital Theory purports that attrition is usually directly related to the amount of capital a person holds in their job (Grissmer & Kirby, 1987). The factors that create capital – family commitments, job expectations, and relationships with co-workers – also determine one's overall satisfaction with a job (Ingersoll, 2003). Therefore, if one knows what causes job satisfaction and dissatisfaction in agriculture teachers, programs may be developed to target these areas in agriculture teachers (Cano & Miller, 1992b). According to Bruening and Hoover (1991), the level of satisfaction “secondary agricultural education teachers [had] with their jobs was best explained by the fulfillment the teachers received from teaching and the satisfaction they derived from teaching” (p. 42). Many studies have discovered that most agriculture teachers are satisfied with their job when it comes to the working conditions and the satisfying factors of achievement, advancement, recognition, responsibility, and the work itself (Castillo & Cano, 1999; Dainty, Sandford, Su, &

Belcher, 2011). However, job satisfaction relates to more than just working conditions; it also includes family attributes such as marital satisfaction and the conflict between parental and professional responsibilities (Odell, Cochran, Lawrence, & Gartin, 1990). Job satisfaction as it relates to personal and family reasons, especially among women, has been found to be low in previous studies (Foster, 2001).

Based upon the Human Capital Theory and studies involving attrition and job satisfaction, the following conceptual model (Figure 1) has been developed to frame this study and future agriculture teacher retention research. The conceptual model depicts the primary categories that contribute to job satisfaction as a whole and demonstrates how job satisfaction relates to teacher retention and attrition. Literature supporting the comprehensiveness of the conceptual model is summarized, but this study focused on the variables within the Working Conditions category.

Working Conditions

The conceptual model outlines working conditions including administrative support, student demographics and behavior, school environment, and additional job expectations. Many studies have examined job satisfaction as it relates to working conditions (Bennett, Iverson, Rohns, Langone, & Edwards, 2002; Cano & Mil-

ler, 1992b; Castillo et al., 1999; Walker et al., 2004; Watson & Hillison, 1991).

In the study by Walker et al. (2004), job satisfaction of those who left the profession was compared with those who changed schools and those who remained teaching. They determined that all teachers were generally satisfied with their first year teaching experience, and that "lack of administrative support" was the reason most frequently stated for leaving the profession, followed by "family issues" (p. 35). According to Walker et al., age, years in current teaching position, total years of teaching, degree, and tenure of female and male agriculture teachers were not significantly related to overall job satisfaction. People leaving agricultural education are "leaving for opportunity aspects that they are not receiving through the realms of teaching secondary agriculture" (Walker et al., 2004, p. 36). Therefore, one might be satisfied with certain aspects of the job itself, but not with the opportunities it provides such as opportunities for advancement.

Bennett et al. researched the level of job satisfaction of agriculture teachers in 2002. They reported that agriculture teachers in Georgia were generally satisfied with their teaching position. They also found that *extended day status* (whether or not a teacher had a contract to be paid for an extra hour beyond the normal school day) and *years of experience* had significant and positive impacts on the level of job satisfaction.

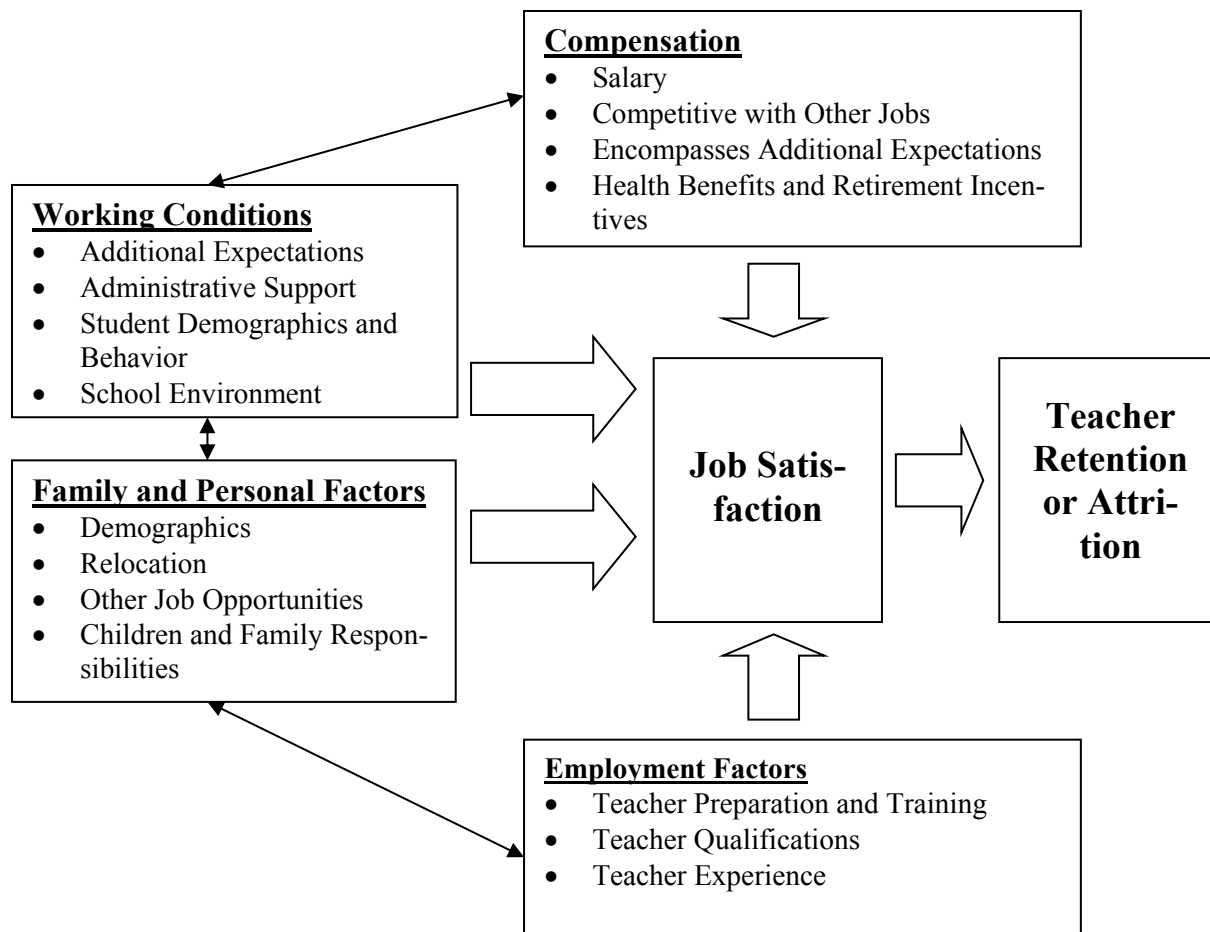


Figure 1. Conceptual model of primary causes of teacher attrition in agricultural education.

According to Watson and Hillison (1991), agriculture teachers in West Virginia were most dissatisfied with school policies and practices, advancement opportunities, and supervisor competency – all of which fall under the category of working conditions. It has also been found that job satisfaction as it relates to working conditions can vary by gender as males and females rank different items as important contributors of job satisfaction. Females were not satisfied with the supervision they received while males were not satisfied with their working conditions in general (Cano & Miller, 1992a). There are many areas under the category of working conditions that contribute to job satisfaction. Items such as school administrative support, facilities provided, and teacher support programs are contributors to teacher attrition, but there are bound to be other factors involved.

Purpose and Objectives

The purpose of this study was to investigate intention to leave the profession of agricultural education. Specifically, the goal was to determine the primary contributors to retention and attrition (including job satisfaction related to working conditions) among agriculture teachers in Georgia. The following objectives guided these purposes.

1. Identify conceptually relevant demographics of Georgia agriculture teachers.
2. Determine Georgia agriculture teachers' self-perceived likelihood of leaving the profession.
3. Determine level of job satisfaction, as it relates to gender and working conditions, for Georgia agriculture teachers.
4. Explain the factors associated with leaving the teaching profession, and describe

teacher-reported reasons for leaving the profession soon.

Research Methods and Procedures

This study utilized a survey and correlational research designed to gather information about participants and determine contributing factors of teachers' intention to remain in the profession. Independent variables from the conceptual model that were studied included relevant family and person factors, employment factors, working conditions, and job satisfaction. The dependent variable was teachers' self-reported likelihood of leaving early or staying in the profession.

The target population for this study included current agricultural education teachers in Georgia. A simple random sample of agricultural education teachers in Georgia was taken from the population frame ($N = 390$), which was the Georgia Department of Agricultural Education Teacher Directory. The sample sought was 248 participants to achieve a 99% confidence level and 5% margin of error; 159 usable responses were collected, representing a response rate of 64%. With only a 64% response rate, non-response could be viewed as a threat to external validity. To account for this threat, early respondents ($n = 129$) were compared to late respondents ($n = 30$) for each of the variables of interest from the last two "successive waves" of responses following the last two stimuli for response (Lindner, Murphy, & Briers, 2001). A t -test was used for these comparisons and only two variables indicated any differences between early and late respondents. Late responders were less likely to have advanced degrees, $t(156, 51) = 2.75, p < .01$, and they were more likely to be alternatively certified than early responders, $t(156, 32) = 2.30, p = .02$. However, no significant differences were found for the primary variables of interest such as job satisfaction or the retention/attrition variables.

An instrument was created from a similar job satisfaction questionnaire utilized by Bennett et al. (2002) and additional questions to determine how likely current teachers are to leave the profession within certain time periods. A panel of experts consisting of agricultural education faculty members established face validity. Par-

ticipants who said they were likely to leave the profession were also asked what factor would most likely contribute to their intention to remain in the profession. The survey took approximately 15-20 minutes to complete. Participants were contacted via e-mail and asked to complete the survey using the web host, Survey-Monkey™. Follow up contacts were then made at the Georgia mid-year agriculture teachers' conference in January and through follow up e-mails and phone contacts.

The first section of the instrument asked relevant demographic questions, and the second section of the instrument asked participants to indicate how likely they were to leave the profession during certain time periods (in the next five years, in the next five to ten years, after 25 years of service for early retirement, and temporarily leave and then return). The third section of the instrument inquired about the primary cause of attrition for those who responded that they were somewhat likely or very likely to leave. The last section of the instrument was a replication of the study conducted by Bennett et al. (2002). This section contained thirty job satisfaction indicators that determine the teachers' job satisfaction as it relates to working conditions. Responses within this construct were highly consistent. The Cronbach's alpha for the single-construct survey instrument was .95 in the 2002 study performed by Bennett et al. and the reliability score for the job satisfaction scale in this study was .93 with 35 job satisfaction items.

Data were analyzed using both descriptive and inferential statistics via SPSS version 17.0. Frequencies, percentages, means, and standard deviations were used to summarize the demographic data. Frequencies for job satisfaction items were categorized into Disagree, Undecided, and Agree so that the full range of information regarding job satisfaction could be surveyed, and a summated mean was calculated for job satisfaction. Means and standard deviations were used to report likelihood of leaving or staying in the profession, and t -tests were employed to determine gender differences for likelihood of retention and job satisfaction; statistical significance was set at $p < .05$ a priori. Backward elimination regression (Pedhazur, 1982) on the dependent variable, *likelihood to leave [early] in the next 5 years*, was the first way to explain

attrition/retention. Effect sizes (Cohen's d for t -tests; R^2 for multiple regressions) were calculated for each of inferential analyses conducted to provide an indicator of the "magnitude of the effect" (Biddix, 2009, para. 7). Secondly, a new bivariate was created to compare two groups – those who are likely to leave soon and those who are not likely to leave soon, and frequencies of reasons for leaving soon were recorded.

Findings/Results

Objective One was to identify the conceptually relevant demographics of Georgia agriculture teachers. Of those surveyed, 98 (61.6%) were male and 61 (38.4%) were female. One hundred fifty-four respondents (96.9 %) were white, 4 (2.5%) were black, and 1 (.6%) was Asian American. The majority of participants ($n = 132$, 83%) were certified traditionally, while 18 (11.3%) received alternative certification. Additionally, 8 (5%) respondents were still working towards alternative certification. Seventy-one percent of respondents were high school teachers ($n = 113$). Middle school teachers composed 20.8% ($n = 33$), young farmer teachers composed 6.9% ($n = 11$), and 1.3% ($n = 2$) of teachers teach both middle and high school. *Young farmer* teachers are classroom teachers who also work part of their day in the community coordinating educational programs and opportunities for local adult (not necessarily 'young') farmers. Most participants, 58.5% ($n = 93$), held a 12 month contract, 32.7% ($n = 52$) held an 11 month contract, 1 respondent had no

contract, 5.7% ($n = 9$) of teachers had a 10 month contract, 2 teachers had 11.5 month contracts, and 2 teachers had 10 month (half time) contracts. Regarding educational attainment, 37.7% ($n = 60$) had master degrees, 32.1% ($n = 51$) had bachelor degrees, 25.2% ($n = 40$) had specialist degrees, and 4.4% ($n = 7$) had doctorate degrees. Nearly all agriculture teachers were on one-hour-per-day of extended day status ($n = 146$, 91.8%), close to six percent 6% of respondents ($n = 9$) reported having no extended day, and 2.5% ($n = 4$) were employed half time. Agriculture teachers reported an average age of 37.4 years ($SD = 11.8$). The mean total of the years participants had been teaching agriculture was 11.5 ($SD = 9.5$). Teachers taught 4.1 ($SD = 1.6$) classes per day, and there was an average of 1.8 ($SD = 1.0$) agriculture teachers at each school. The participants had been in their current position and average of 7.9 years ($SD = 7.9$).

Objective two determined Georgia agriculture teachers' self-perceived likelihood of leaving the profession. Using a five point rating scale (1=*Very Unlikely*, 2 = *Somewhat Unlikely*, 3 = *Undecided*, 4 = *Somewhat Likely*, 5 = *Very Likely*), teachers reported that at the present time they were very unlikely to leave the profession in the next five years ($M = 2.26$, $SD = 1.49$) and unlikely to leave in the next 5-10 years ($M = 2.46$, $SD = 1.51$) or after 25 years for early retirement ($M = 2.75$, $SD = 1.44$). Teachers also reported being very unlikely to leave for a period of time and then return to teaching ($M = 1.64$, $SD = 1.10$, see Table 1).

Table 1

Teachers' Likelihood of Leaving the Profession ($n = 159$)

Variable	M	SD
Likelihood of leaving in the next 5 years.	2.26	1.49
Likelihood of leaving 5-10 years from now.	2.46	1.51
Likelihood of leaving after 25 years of service for early retirement.	2.75	1.44
Likelihood of leaving for a period of time and then returning.	1.64	1.10

Note. 1 = *Very Unlikely*, 2 = *Somewhat Unlikely*, 3 = *Undecided*, 4 = *Somewhat Likely*, 5 = *Very Likely*.

As depicted in Table 2, females ($M = 3.16$, $SD = 1.36$) were more likely than males ($M = 2.50$, $SD = 1.44$) to leave after 25 years of service for early retirement incentives. Females ($M = 1.96$, $SD = 1.25$) were also more likely than males ($M =$

1.43 , $SD = .95$) to leave for a period of time and then return to the profession. These differences were significant, and they were represented by a medium effect size (Cohen, 1977).

Table 2

Self-Perceived Likelihood of Retention by Gender

Variable	Gender	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	Cohen's <i>d</i>
Teachers who are likely to leave in the next 5 years.	Male	97	2.27	1.58	.21	155	.84	.04
	Female	60	2.22	1.34				
Teachers who are likely to leave 5-10 years from now.	Male	91	2.44	1.57	-.20	146	.84	.03
	Female	57	2.49	1.41				
Teachers who are likely to leave after 25 years of service for early retirement.	Male	92	2.50	1.44	-2.77	148	.01	.48
	Female	58	3.16	1.36				
Teachers who are likely to leave for a period of time and then return.	Male	90	1.43	.95	-2.92	145	.00	.55
	Female	57	1.96	1.25				

Note. 1=Very Unlikely, 2=Somewhat Unlikely, 3=Undecided, 4=Somewhat Likely, 5=Very Likely.

Objective Three determined the level of job satisfaction as it relates to working conditions among teachers. The summated mean for job satisfaction was 132.32 ($SD = 20.51$). Frequencies of agreement for each item-indicator of job satisfaction as it relates to working conditions are displayed in Table 3. The statements that agriculture teachers most agreed with were, "I am an effective teacher (able to get students to learn as desired)" ($f = 146$), "Students are inter-

ested in what I teach" ($f = 136$), and "I am provided adequate administrative support and backing" ($f = 131$). Teachers showed the greatest amount of disagreement with the statements, "I seldom feel a sense of burnout" ($f = 83$), "appropriate students are placed in my classes" ($f = 59$), and "even if I come into enough money that I can live comfortably without working, I will remain in this profession" ($f = 59$).

Table 3

Job Satisfaction as it Relates to Working Conditions by Item

Job Satisfaction Indicator	Disagree <i>f</i>	Undecided <i>f</i>	Agree <i>f</i>
I am an effective teacher.	3	8	146
Students are interested in what I teach.	8	13	136
I am provided adequate administrative support and backing.	18	8	131
I feel appreciated by parents for my work with students.	19	10	128
The student to teacher ratio in my classes is appropriate.	20	10	127
The school's facilities are adequate.	24	12	120
My school has adequate supplies for my program.	23	14	120
I feel appreciated by my colleagues for my work.	16	21	119
I feel appreciated by my administrators for my work.	28	9	119
The students in my program are well behaved.	25	13	119
I feel appreciated by students for my work.	17	23	117
The administrators in my school are strong educ. leaders.	22	17	116
My long-range goal is to continue teaching this program.	14	28	115
Salary of this job is adequate.	23	19	115
I feel encouragement from administrators for my initiatives.	25	17	114
The equipment at my school is adequate.	32	11	112
Materials at my disposal are adequate.	30	17	110
I rarely feel most other educators are more satisfied.	17	31	109
I seldom feel isolated.	31	17	109
I rarely feel vulnerable to criticism in my teaching.	28	24	105
What is expected of me is realistic.	30	28	99
Teachers have appropriate professional status within society.	36	23	98
I seldom think of changing jobs.	45	18	93
Hours of this job are satisfactory.	46	19	91
Society has realistic expectations of me.	34	35	87
Amount of prep time required for the program is adequate.	55	17	85
Adequate promotional opportunities in education exist.	40	37	79
Even with enough money to live comfortably without working, I would remain in this position.	59	26	72
Appropriate students are placed in my classes.	59	35	63
I seldom feel a sense of burnout.	83	25	49

Note. "Disagree" includes all who responded *Mostly Disagree* and *Somewhat Disagree*, "Agree" includes all who responded *Mostly Agree* and *Somewhat Agree*.

Table 4 displays the differences in job satisfaction by gender. Males ($M = 134.41$, $SD = 19.91$) were only slightly more satisfied than females

($M = 128.67$, $SD = 21.14$), but this finding was not significant.

Table 4

Job Satisfaction by Gender

	Gender	<i>f</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	Cohen's <i>d</i>
Job Satisfaction	male	97	134.41	19.91	1.72	155	.09	.28
	female	60	128.67	21.14				

Objective Four determined variable contributors to teachers' self-reported likelihood of leaving the profession in the next five years. Length of contract (9, 10, 11, 12 months), classes taught per day, number of teachers per school, years teaching at current school, years teaching agricultural education prior to current position, and job satisfaction yielded the best model explaining the likelihood of leaving soon, $F(6, 134) = 7.44$, $p < .00$. R for the model was .50, R^2 for the model was .25 and adjusted R^2 was .22. Table 5 displays the non-standardized

regression coefficients (B), intercept, and standard regression coefficients (β) for each variable. The variables listed below in Table 5 contributed 25% in shared variability explaining likelihood of leaving soon (in the next five years). Directionally speaking, length of contract and years teaching at current school were positively associated with leaving soon, and classes taught per day, number of agriculture teachers per school, years teaching agriculture education prior to current position, and job satisfaction were associated with a lower likelihood of leaving.

Table 5

Contributors to Leaving in the Next Five Years

	B	SE	Beta	<i>t</i>	Sig.
(Constant)	4.42	.892		4.96	.00
Length of Contract	.50	.15	.25	3.25	.00
Classes Taught Per Day	-.15	.08	-.16	-1.97	.05
Number of Teachers Per School	-.25	.13	-.16	-1.99	.05
Years Teaching at Current School	.06	.02	.33	4.23	.00
Years Teaching Prior to Current	-.04	.02	-.16	-2.05	.04
Job Satisfaction	-.02	.01	-.23	-2.91	.00

Note. $R = .50$; $R^2 = .25$; Adjusted $R^2 = .22$.

Of those stating they were likely or very likely to leave the profession, 23.4% ($f = 22$) planned to retire, 18.1% ($f = 17$) would likely leave due to children and family commitments,

17% ($f = 16$) would likely leave due to early retirement, and 9.6% ($f = 9$) would likely leave due to student demographics and behavior (Table 6).

Table 6

Reasons for Teacher-Reports of "Likely to Leave Soon"

Variable	<i>f</i>	%
Normal Retirement	22	23.4
Children and Family Commitments	17	18.1
Early Retirement	16	17.0
Student Demographics and Behavior	9	9.6
Other Job Opportunities	8	8.5
School Environment	6	6.4
Extended Day/Extended Year Standards and Expectations	5	5.3
Administrative Support	5	5.3
Relocation	2	2.1
More Education	2	2.1
Salary	1	1.1
Multiple Reasons/Combination	1	1.1
Total	94	100.0

Conclusions and Implications

Nationally, it has been reported that many agriculture teachers will leave the profession before they attain thirty years of service for normal retirement (Kantrovich, 2007). Overall, teachers in our study were unlikely to leave the profession any time soon and even fewer planned to leave for a period of time and then return. Females were more likely than males to leave after 25 years of service for early retirement incentives and to leave for a period of time and then return. Both of these differences support Ingersoll's (2003) findings that female teachers are more likely than male teachers to leave for a period of time and then return as they leave for child rearing and family responsibilities.

Gender, though, along with ethnicity, certification route, level of teaching, extended day status, and highest degree earned, was not retained in the best model explaining teachers' likelihood of leaving in the next five years. The male majority of agriculture teachers in this study was expected and in line with other research (Camp, Broyles, & Skelton, 2002; Foster, 2001), but this trend, combined with the consistent findings that at least half of most teacher preparation students are female, makes gender an important demographic to consider when predicting retention (Stair, Warner, & Moore,

2012; Stripling, Ricketts, Roberts, & Harlin, 2008; Stripling & Roberts, 2012; Wingenbach, White, Degenhart, Pannkuk, & Kujawski, 2007). Ethnicity has been examined with much less frequency in the literature, and it cannot be addressed here either, as the number of minorities participating in this study was so low that the variable could hardly be expected to be part of any predictive model for teacher retention.

Most of the participants (83%) received their teaching certificate via traditional pre-service teacher education, and analyses yielded no indication of certification route influencing participant perceptions about their likelihood of leaving early. Our findings concur with Herbert's (2004) ten-year longitudinal study in Texas comparing cohorts of traditionally and alternatively prepared teachers that found no indication of the influence of certification route on leaving teaching early.

Similarly, most of the participants taught high school (71%) and most were on "extended day" (91.8%), which is pay for one additional hour per day available to Georgia teachers, but both of these independent variables had no association with intention to leave teaching early. However, as with ethnicity in this study, low numbers of participants and limited other studies on middle school educators and those without "extended day" contracts should keep these variables on the priority list in future investigations

seeking to solve the attrition problem; especially in light of the job differences between middle school and secondary high school educators of agriculture.

Advanced degrees, except for the doctorate level, were evenly distributed among teachers and, as an independent variable, offer no potential for understanding why agriculture teachers leave early; similarly, age ($M = 37.4$ years) did not remain in the model best predicting intention to leave early, which is similar to the findings of Walker et al. (2004). However, the number of years taught and the number of classes taught per day did enter the model.

Job satisfaction, years taught at current school, years teaching prior to current school, number of teachers per school [program], classes taught per day, and length of contract remained in a significant, but complicated model of factors that explained the greatest amount of variation in likelihood of leaving early.

First, the more satisfied teachers are, the less likely they are to leave early. Our study confirms previous studies (i.e., Bennett et al., 2002) and our conceptual model showing the influence of job satisfaction on leaving prematurely. And the teachers in our study were generally satisfied with their job as it relates to working conditions. Teachers are satisfied with the working conditions of their job and with items such as classroom management, administrative support, and interaction with students. However, responses indicate that Georgia agriculture teachers do feel the effects of teacher burnout. This may be due in part to the extra expectations and the extra hours they must commit to the job, which contribute to emotional exhaustion (Croom, 2003), but even this does not seem to make teachers want to leave early.

More specifically in relation to job satisfaction, males are slightly more satisfied with their working conditions than females, and, based upon previous research, this could be due to unintended biases placed on females by administrators (Castillo & Cano, 1999), or because females rank different items as important in the area of job satisfaction than males (Cano & Miller, 1992a). It may also have a lot to do with the female agricultural educator's dilemma (Foster, 2001). Foster interviewed female teachers and found a theme of persistent guilt and stress be-

cause of their perception that they spend too much time away from their children and spouse. Also, while burnout was not a construct, it surfaced in the literature and is notable as an item of disagreement among teachers.

There is also an interesting paradox for the next two variables in the model, years taught at current school and years teaching prior to current school. There was a positive relationship between years taught at current school and likelihood of leaving early, and there was a negative relationship between years teaching prior to current school and likelihood of leaving early. It makes sense that teachers who have been in their current position longer would leave sooner, but what does it mean that teachers who taught longer prior to their current position are less likely to leave early? Perhaps prior teaching experience lends a certain feeling of competence or confidence leading to staying in the profession longer. Or maybe the reason teachers left prior positions was because of unfavorable circumstances. Clarification of this finding is needed prior to making recommendations about hiring experienced teachers for greater retention probability, but the finding is noteworthy.

The model also revealed a relationship between multiple teachers in a program and that program's teachers remaining in teaching. This finding is consistent with literature suggesting that mentorship is essential to retention. Following a four-year cohort study on mentorship by Odell and Ferraro (1992), two cohorts of new teachers were evaluated to determine if they had remained in teaching. Approximately 96% of those in the program who were located were still teaching, so our finding that teachers in multiple-teacher programs were less likely to leave early is supported.

The number of classes was also inversely related to teachers leaving the profession early. The more classes taught per day, the less likely teachers were to leave the profession early. This is interesting because teaching more classes per day requires additional preparation time for teachers; however, a more traditional six or seven period day schedule may be more desirable for teachers than a four period block schedule. A 90-minute block may simply be too long for some teachers to plan for, or for students to pay attention. Regardless, this finding should also

be looked at further before any recommendations can be made.

Also requiring further investigation is the positive relationship between lengths of teaching contract and leaving early. Does this mean the most seasoned teachers possess greater numbers of extended contracts? Or does it mean that those with full twelve-month contracts are more burned out? This is the first time in our study that we are able to support the common assumption that agriculture teachers are likely to leave the profession for another career due to being drastically overworked (Anderson, 1979; Moore & Camp, 1979).

The last piece of our study was simply to ask why those teachers who had indicated they would leave early their reason for doing so. The obvious number one answer was retirement, but what were the primary reasons teachers might leave *before* retirement? Other than retirement, children and family commitments are the primary cause for the early departure of agriculture teachers in Georgia. This finding was expected due to the additional responsibilities, days on the job, and work hours among agriculture teachers compared to regular education teachers, leaving little time for family and children commitments. Our finding that females are more likely to leave the profession first, either temporarily or permanently, oftentimes for their family, reintroduces Foster's (2001) idea of the female agricultural educator's dilemma. Foster discovered that women consistently wonder if they should even start a family, and if they do, guilt pervades concerning the lack of time they give to the family.

Recommendations

The random sample in this study represented the actual picture of agriculture teachers' gender and ethnic make-up in Georgia, but future studies should stratify the sample to include more females, middle school teachers, and, especially, minorities, thus providing a dataset with more

optimal conditions for determining if certain groups are retained in agriculture education at higher rates. In fact, the scope of the retention problem, the pace at which alternative certification is becoming the new normal, and a recent study by Robinson and Edwards (2012) of early career teachers in Oklahoma finding that traditional teacher preparation improved retention, ought to keep the certification route in the mix for future studies seeking to solve the retention problem.

The following recommendations are provided to better understand the factors which lead to teachers either leaving or remaining in the profession. While both males and females were generally satisfied with their jobs, there was a difference in job satisfaction between genders, and females were more likely to leave early after 25 years of service, and to leave early and come back. This trend will continue if perspectives do not begin to change, at least at the margins. Studies should be conducted to determine why these differences in job satisfaction between genders exist.

More research needs to be conducted in the area of teacher burnout in agriculture education to determine its causes and effects on teacher attrition. While teachers in this study generally plan to remain in the profession, the continuing effects of teacher burnout may affect their future decision about remaining in the profession.

Qualitative analysis and more detailed quantitative research are needed to dig deeper to find out how and why Job Satisfaction, Years Taught at Current School, Years Teaching Prior to Current School, Number of Teachers Per School [program], Classes Taught Per Day, and Length of Contract contribute to job satisfaction and retention. Finally, further research should continue to look at the area of job satisfaction as it relates to intention to remain in the profession, as this information could be imperative to retaining qualified agriculture teachers and preventing continuing shortages in the profession.

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- ABBY TIPPENS is a graduate student in the Department of Agricultural Leadership, Education & Communication, 137 Four Towers Building, The University of Georgia, Athens, GA 30602
- JOHN C. RICKETTS is an extension associate professor and program leader for agricultural and extension education, Tennessee State University, 203 Lawson Hall, 3500 John A. Merritt Boulevard, Nashville, Tennessee 37209. Email: jrocket1@tnstate.edu, Telephone: 615-963-7620.
- A. CHRISTIAN MORGAN is an assistant professor in the Department of Agricultural Leadership, Education & Communication, 137 Four Towers Building, The University of Georgia, Athens, GA 30602, Email: acm@uga.edu, Telephone: 706-542-7102.
- MARIA NAVARRO is an associate professor in the Department of Agricultural Leadership, Education & Communication, 137 Four Towers Building, The University of Georgia, Athens, GA 30602, Email: mnavarro@uga.edu, Telephone: 706-583-0225.
- FRANK B. FLANDERS is an assistant professor and agricultural education teacher preparation undergraduate coordinator in the Department of Agricultural Leadership, Education & Communication, 137 Four Towers Building, The University of Georgia, Athens, GA 30602, Email: flanders@uga.edu, Telephone: 706-542-8646.