

The Daily Grind: Assessing Gender and Experience-Based Differences in Agricultural Educators' Perceived Job Satisfaction

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Abstract

Teacher retention and attrition are among the most significant threats to agricultural education's impact. Approximately 41% of teachers leave in their first five years of service for reasons such as a lack of confidence in teaching the curriculum, burnout, student behavior, long work hours, and low salaries compared to similarly educated professionals. This study assessed gender and experience-based differences in agricultural educator job satisfaction. This study utilized a five-point Likert scale along with the Abridged Job Descriptive Index (AJDI) to evaluate the job satisfaction of educators in four states—Oklahoma, Montana, Virginia, and Louisiana. The three research objectives were analyzed using central tendencies, an independent samples t-test, and an Analysis of Variance (ANOVA). Overall, the analysis suggested statistically significant differences in how male and female agricultural educators perceived their job satisfaction, with females ranking their satisfaction significantly lower in Classroom/Lab Instruction, FFA, and SAE than their male colleagues. Specifically, female agricultural educators rated their satisfaction lower in the areas of coworkers and professional promotion. Additionally, the analysis revealed that mid-career educators were significantly less satisfied with their compensation than late-career educators. Based on these findings, we recommend activities that promote interdisciplinary relationship-building between teachers in the school and find events that encourage relationships between female educators in the profession. Furthermore, in a world of limited resources, we recommend professional development to assist mid-career professionals with personal financial management to help build satisfaction around their compensation.

Review of Literature

School-based agricultural education (SBAE) has impacted millions of students since its inception. Unfortunately, one of the most significant threats to SBAE is recruiting and retaining qualified agricultural educators (Solomonson & Retallick, 2018). This challenge of teacher attrition has plagued the profession for decades (Lemons et al., 2015). Smith et al. (2023) reported that the profession lost 46 programs due to insufficient qualified teachers. While this shortage poses a significant threat to SBAE, its negative impact on the profession is not new (Lemons et al., 2015; Woodin, 1967). For context, Woodin (1967) reported that 117 programs would not operate during the 1967–1968 academic year due to the teacher shortage, and Craig (1983) reported a five-year decline in the number of agricultural educators nationally, decreasing by 745 educators.

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Solomonson et al. (2021) identified the top factors influencing agricultural educators to maintain their careers within the profession, and influences such as ‘Teacher’s ability to engage students’ and ‘Teacher’s attitude toward students’ rose to the top. Agricultural educators’ deep admiration for their students is often a primary factor influencing teachers to maintain their careers within the profession (Solomonson et al., 2021, p. 128). Norris, Swartzel, and McCubbins (2024) found similar results regarding factors such as engaging and educating students, which were among the top five items influencing educators to continue their careers in SBAE. While teachers generally care for their students, this affinity for student well-being can be stressful (Schmidt et al., 2022). Agricultural educators often feel an intense passion for teaching students in harmful situations such as Adverse Childhood Experiences (ACEs) (Norris & Norris-Parish, 2024; Schmidt et al., 2022). Schmidt et al. (2022) found that educators often have moderate Secondary Traumatic Stress (STS) when teaching and supporting students with ACEs and that STS is positively correlated with burnout. Norris and Norris-Parish (2024) determined that agricultural educators support students with ACEs regularly. However, Norris and Norris-Parish (2024) also suggested that agricultural educators are often not confident in supporting students with ACEs in some situations, which could exacerbate feelings of STS and burnout (Schmidt et al., 2024).

Unfortunately, there are numerous reasons why agricultural educators leave the profession, including job dissatisfaction being a primary factor (Moore & Camp, 1979; Solomonson et al., 2018). Moore and Camp (1979) evaluated why agricultural educators left the profession, including (a) “Long hours,” (b) “Had students who should not be in vocational agriculture,” (c) “Long range occupational goal was something different than teaching vocational agriculture,” and (d) “Inadequate salary” (p. 13). Solomonson et al. (2018) found similar results with some of the top ten factors influencing educators to leave the profession, including (a) “Lack of confidence to teach the curriculum,” (b) “Inability to feel ‘caught up’ with responsibilities,” (c) “Feelings of guilt for time spent away from family,” and (d). “Negativity towards administration” (p. 331). These feelings of burnout, imposter syndrome, and lack of administrative support have resonated with agricultural educators for many years (Moore & Camp, 1979; Solomonson et al., 2018). Some agricultural educators reported that burnout is one of the top factors driving them out of the profession (Smith & Smalley, 2018; Solomonson et al., 2021; Sorensen et al., 2016). With approximately 41% of educators leaving the profession in their first five years (Ingersoll et al., 2014), early-career educators are particularly prone to attrition. While many factors are attributed to agricultural educator burnout, the most reported include FFA and Supervised Agricultural Experience (SAE) duties (King et al., 2013; Traini et al., 2019), work-life balance (Blackburn et al., 2017; Sorensen et al., 2016; Traini et al., 2019), a lack of administrative support (Deever et al., 2020; Solomonson et al., 2018), student behavior (Solomonson et al., 2018), and financial compensation (Still & Solomonson, 2024). These factors contributing to educators leaving the profession are intensified by other influences, including agricultural educator’s long work hours (Sorensen & McKim, 2014), a lack of administrator knowledge on some aspects of agricultural education (Gregg et al., 2023; Norris, Norris-Parish, & Crayton, 2024), and low compensation compared to similarly educated professionals (Allegretto, 2023; Still & Solomonson, 2024). While attrition is found in agricultural education, a positive consideration is that they may not be as susceptible as teachers in other disciplines. One of the chief complaints among educators at large is low compensation rates, with the average educator in the U.S. earning \$66,745 and the average starting salary at \$42,844 (National Education Association, 2023). Agricultural educators are often compensated more than educators in other disciplines with extended contracts and supplements for additional duties (Still & Solomonson, 2024). Additionally, Still and Solomonson (2024) determined that 73.1% of agricultural educators in Illinois agree that this additional compensation is a key factor in their decision to remain in the profession.

While teacher attrition is an ongoing threat to agricultural education, many educators report high job satisfaction (Blackburn et al., 2017). Additionally, all educators may not perceive the threats to attrition equally, with some demographics of teachers being more susceptible, such as females and teachers in high minority schools (Borman & Dowling, 2008; King et al., 2013; Sorensen et al., 2017). Furthermore, the

demographics of agricultural educators have changed substantially over the last few decades (Camp, 1992; National Association for Agricultural Educators [NAAE], 2023a). Camp (1992) reported that approximately 8.7% of agricultural educators were female during the 1992–1993 academic year. Today, over 50% of agricultural educators nationally are female (NAAE, 2023), with some states having as many as 70% female agricultural educators (NAAE, 2023). This significant change in national agricultural educator demographics creates teacher retention and attrition challenges since female educators are more likely to exit the profession earlier than males (Kelsey, 2006; Mack et al., 2019). King et al. (2013) suggest that FFA and SAE duties cause female teachers the most stress, and Sorenson et al. (2017) found that female educators differed significantly in salary and years of teaching experience. However, gender did not have a significant relationship when evaluating work’s interference with family responsibilities (Sorenson et al., 2017). Additionally, Tippens et al. (2013), Solomonson and Retallick (2018), and Smith and Smalley (2018) suggested that educators in different career stages have various levels of job satisfaction. Overall, little is known about the differences in job satisfaction among male and female agricultural educators and educators in various career stages.

Purpose and Objectives

The purpose of this study was to assess gender and experience-based differences in job satisfaction among agricultural educators in four states— Oklahoma, Montana, Virginia, and Louisiana. The following research objectives guided this study:

- 1.) Describe the overall job satisfaction of agricultural educators.
- 2.) Assess statistical differences between the job satisfaction of male and female agricultural educators.
- 3.) Assess statistical differences between the job satisfaction of agricultural educators in different career stages.

Conceptual Framework

We completed a thorough review of the literature that revealed multiple factors influencing the job satisfaction of agricultural educators. The factors identified in the conceptual framework directly correspond to the instrument used to conduct this study and ultimately inform the study's findings. The factors identified in the literature review are listed below.

Work

Agricultural educators often claim that their passion for students and a love for educating students about agriculture are driving factors to remain in the profession (Norris, Swortzel, & McCubbins, 2024). Solomonson et al. (2021) determined that a “teacher’s ability to engage students” and a “teacher’s attitude toward students” are among the top reasons educators remain in the profession (p. 128). Furthermore, agricultural educators often find assisting students in developing critical employability skills (Free, 2017) and technical skills (Ramsey & Edwards, 2012) through classroom instruction, SAE, and FFA rewarding (Solomonson et al., 2018). While agricultural educators often enjoy their work, many claim that it does come at the expense of their personal lives (Solomonson & Retallick, 2018).

Compensation

Overall, educators are compensated less than similarly educated professionals (Allegretto, 2023). This is concerning, considering Norris, Swortzel, and McCubbins (2024) found that retirement, salary, and insurance benefits moderately impacted agricultural educators' motivation to remain in the profession. In many cases, agricultural educators are compensated above the typical teacher contract through stipends or additional days of employment (Solomonson & Still, 2024). This additional compensation often makes

agricultural educators satisfied with their compensation (Solomonson & Still, 2024). Furthermore, Tippens et al. (2013) determined that approximately 73% of educators felt their salary was adequate for their job.

Coworkers

One of the key aspects of agricultural educator job satisfaction is a positive school environment and supportive coworkers (Norris, Swortzel, and McCubbins, 2024; Solomonson et al., 2021). Solomonson et al. (2021) found that novice teachers valued mentorship from other educators in the school. This is particularly important, considering that approximately 41% of early career educators leave the profession in the first five years (Ingersoll et al., 2014). Additionally, more experienced educators highly value collaboration among their peers, increasing job satisfaction (De Lay & Washburn, 2013). Torres et al. (2009) determined that working with peers with low productivity or motivation can increase stress and hurt job satisfaction. Hasselquist et al.'s (2017) conclusion was that school culture, including a positive relationship with coworkers, was a significant factor in the job satisfaction of educators.

Supervisors

A lack of administrative support can be a significant stressor for some agricultural educators and can lead to a lack of job satisfaction (Solomonson & Retallick, 2018). Solomonson et al. (2021) found that a supportive administration was a critical factor affecting educator's decision to remain in the profession. Norris, Norris-Parish, and Crayton (2024) found that many administrators, including superintendents, have little to no teaching experience, which could affect their views of some aspects of an agricultural educator's role. This is contrasted with Still and Solomonson's (2024) findings, which suggested that school administrators support agricultural educators' additional compensation through stipends and compensation, which could help improve job satisfaction.

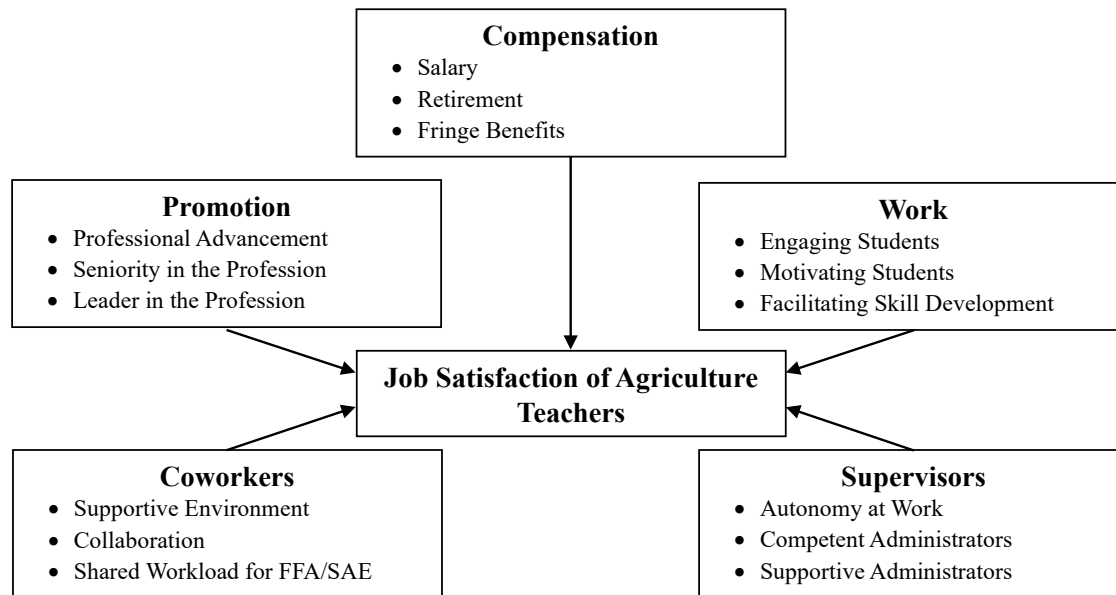
Promotion

Smith et al. (2023) found that approximately 51.9% of educators who left the profession in the 2021–2022 academic year left for other career opportunities such as employment in industry, state agricultural education staff, post-secondary teaching, school administration, secondary teaching of another subject besides agriculture, or production agriculture. Presumably, many educators who left the profession viewed these career opportunities outside the classroom as a promotion and a way to increase upward mobility. Tippens et al. (2013) found that 45.9% of agricultural educators either disagreed or were undecided about whether there are adequate promotional opportunities in education. This lack of promotional advancement (Tippens et al., 2013) could explain teacher attrition into other career opportunities (Smith et al., 2023).

Overall, these five factors are critical to an agricultural educator's job satisfaction and, ultimately, their retention in the profession. This study assessed gender and experience-based differences in job satisfaction among agricultural educators using these five factors (see Figure 1).

Figure 1

Factors Contributing to Agricultural Educator Job Satisfaction



Note. Model Developed from a Review of Literature and the Abridged Job Descriptive Index Instrument (Stanton et al., 2002).

Methodology

Participants

This study's participants were agricultural educators in Oklahoma, Montana, Virginia, and Louisiana. Guided by a descriptive correlational research design, we employed systematic sampling to select every third educator in each state, aiming to reduce sampling bias. This approach resulted in a sample of $N = 608$ educators for the study's frame. Overall, there were 249 educators in Oklahoma, 61 in Montana, 165 in Virginia, and 133 in Louisiana within the sample.

Instrumentation

To complete this study, we used a modified instrument from the Abridged Job Descriptive Index (AJDI) developed by Stanton et al. (2002). This index evaluates overall job satisfaction using five factors (Work, Compensation, Promotion, Supervisors, and Coworkers) with five descriptors for each factor (see Table 1). This instrument measured these five factors for the three components of agricultural education (Classroom Instruction, FFA, and SAE) to assess job satisfaction. We provided the participants in this study with a descriptor and asked them to rate how often they felt that emotion toward the factor using a Likert-type scale that ranged from 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*. We reverse-coded negatively worded descriptors for analysis.

Table 1*Factors and Constructs Comprising the Abridged Job Description Index Instrument*

Abridged Job Description Index Instrument
Work
Gives Sense of Accomplishment
Dull*
Satisfying
Uninterested*
Challenging
Compensation
Fair
Underpaid*
Income Adequate for Normal Expenses
Well Paid
Insecure*
Promotion
Good Chance of Promotion
Dead-End Job*
Promotion on Ability
Good Opportunities for Promotion
Unfair Promotion Policy*
Coworkers
Helpful
Boring*
Intelligent
Lazy*
Responsible
Supervisors
Praises Good Work
Annoying*
Tactful
Bad*
Up to Date

Note. *Designates reverse-coded factors. The instrument was developed by Stanton et al. (2002).

Participating agricultural educators were asked to rate these five constructs for Classroom/Lab Instruction, FFA, and SAE.

Stanton et al. (2002) previously assessed the reliability and validity of the instrument. To assess the instrument's validity for this audience, a committee of two New Mexico State University faculty members was assembled to assess the instrument, which was deemed acceptable for this study. We evaluated the instruments' reliability *post hoc* using reliability coefficients (Cronbach's alpha). The reliability coefficient for Classroom/Lab Instruction was .88, FFA was .88, and SAE was .88 (see Table 2). According to Ary et al. (2010), these reliability coefficients meet the minimum threshold for a reliable instrument.

Table 2*Reliability Coefficients for Job Satisfaction Constructs*

Construct	α
Classroom Instruction	.88
FFA	.88
SAE	.88

Data Collection

The study began with a sample of 608 agricultural educators and garnered 127 responses for a 20.9% response rate, with 31 incomplete responses. These incomplete responses were missing critical data and were excluded from parametric statistical analysis, which provided 96 usable responses. To increase the response rate, we distributed the survey electronically with three weekly reminder emails following the initial distribution (Dillman et al., 2014).

Data Analysis

We used central tendencies and standard deviations to analyze research objective one. We used independent samples *t*-tests to analyze the second research objective, and we utilized an Analysis of Variance (ANOVA) to analyze the research objective three. To provide a more robust analysis, we opted to analyze data in objectives two and three using the three areas of agricultural education and the five factors assessed in the AJDI instrument. Additionally, educators with 1–7 years of experience were in the early career stage, 8–21 years of experience were mid-career, and 22+ years of experience were considered late career. To effectively analyze Likert data using parametric statistics, five or more items should be grouped to form constructs (Johnson & Creech, 1983; Norman, 2010). This study utilized five descriptors within all five job satisfaction factors to analyze job satisfaction within classroom instruction, FFA, and SAE. The data for this study was analyzed using SPSS version 28.0.

We used independent samples *t*-tests to assess non-response bias and determine differences between early responders ($n = 38$) and late responders ($n = 58$). The early responders responded to the first email distributed, and the late responders responded to the three reminder emails. Overall, the independent samples *t*-test showed no statistically significant differences between early and late responders, suggesting no non-response concerns (see Table 3).

Table 3*Independent Samples t-test Assessing Non-response Bias*

Constructs	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	Cohen's <i>d</i>
Early Respondents	38	3.27	.49				
Classroom/Lab				-1.58	94	.12	-.33
Late Respondents	58	3.43	.48				
Early Respondents	38	3.39	.47				
FFA				-.97	94	.34	-.20
Late Respondents	58	3.48	.51				
Early Respondents	38	3.15	.50				
SAE				.67	94	.50	-.14
Late Respondents	58	3.23	.56				

Note. $\alpha = .05$. The Likert scale ranged from 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*.

Participant Demographics

The key demographics of the agricultural educators in this study included that ($f = 51$) participants were male and ($f = 45$) were female. Additionally, the majority (54.2%) of participants ($f = 52$) had a bachelor's degree as their highest degree earned, 76.0% taught in a rural area ($f = 73$), 81.1% are either early or middle career ($f = 77$), 69.8% are traditionally certified ($f = 67$), and 54.2% teach in a single person agricultural education program ($f = 52$). The complete list of demographic characteristics of the participants in this study is reported in Table 4.

Table 4

Demographic Data of Participating Agricultural Educators

Demographic Area	Demographic Sub-Area	Participants	
		<i>f</i>	%
Gender	Male	51	46.9
	Female	45	53.1
Race	White/Caucasian	84	87.5
	African American	3	3.1
	Native American	6	6.3
	Other	3	3.1
Highest Degree Earned	No Degree	0	0.0
	Associate's degree	2	2.1
	Bachelor's Degree	52	54.2
	Master's Degree	38	39.5
	Educational Specialist	2	2.1
School System Type	Doctoral	2	2.1
	Rural	73	76.0
	Suburban	17	5.2
	Urban	5	17.8
Years of Teaching Experience	Other	1	1.0
	Early Career (1–7 Years)	38	39.6
	Middle Career (8–23 Years)	39	40.6
	Late Career (24+ Years)	19	19.8
Certification Type	Traditional Certification	67	69.8
	Alternative Certification	25	26.0
	Other	4	4.2
# of Agricultural Educators in the Program	1	52	54.2
	2–3	39	40.6
	4+	5	5.2

Note. $n = 96$.

Limitations

While the authors believe this study is a robust evaluation of the job satisfaction of agricultural educators, its analysis has some limitations. The first limitation is that the AJDI does not evaluate all factors contributing to job satisfaction, such as work-family balance (WFB) or workload, which are stressors to

many agricultural educators (Hainline et al., 2019; Sorensen et al., 2016). Additionally, this study should not be generalized beyond the participants due to its relatively low response rate (20.9%).

Results

Research Objective One

The first research objective aimed to describe the job satisfaction of the participating agricultural educators. Overall, the educators rated that they *sometimes* or *often* feel positively toward FFA ($M = 3.44$, $SD = .72$), Classroom/Lab Instruction ($M = 3.37$, $SD = .74$), and SAE ($M = 3.20$, $SD = .77$). Additionally, the Work category was rated the highest in each area of agricultural education, and the Compensation category was rated the lowest (see Table 5). This suggests that agricultural educators enjoy their work but are not adequately compensated.

Table 5

Descriptive Statistics for Abridged Job Description Index Factors and Constructs

Category	<i>M</i>	<i>SD</i>
Classroom/Lab Construct	3.37	.74
Work	3.85	.53
Compensation	2.84	.78
Promotion	2.83	.83
Supervisors	3.55	.84
Coworkers	3.78	.71
FFA Construct	3.44	.72
Work	3.98	.54
Compensation	2.72	.78
Promotion	2.98	.78
Supervisors	3.73	.76
Coworkers	3.81	.73
SAE Construct	3.20	.77
Work	3.60	.63
Compensation	2.69	.81
Promotion	2.71	.74
Supervisors	3.47	.86
Coworkers	3.53	.82

Note. $n = 96$. The Likert scale ranged from 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*.

Research Objective Two

The second research objective aimed to assess statistical differences in the job satisfaction of male and female agricultural educators. To provide a more robust analysis, these gender-based differences were evaluated using the three areas of agricultural education (Classroom/Lab Instruction, FFA, and SAE) and the five factors evaluated in the AJDI (Work, Compensation, Promotion, Supervisors, and Coworkers). Overall, statistical differences were found for the Classroom/Lab Instruction Construct $t(94) = 2.22$, $p = .03$, the FFA Construct $t(94) = 2.81$, $p = .006$, and the SAE Construct $t(94) = 3.29$, $p = .001$ (see Table 6). Additionally, this analysis used Cohen's d to measure effect size, which was calculated to .46 for the Classroom/Lab Instruction Construct, .47 for the FFA Construct, and .58 for the SAE Construct, which,

according to Cohen (1988), equates to a medium effect size. Furthermore, male agricultural educators (Classroom/Lab Instruction, $M = 3.47$, $SD = .56$; FFA, $M = 3.57$, $SD = .54$; SAE, $M = 3.36$, $SD = .58$) rated their job satisfaction higher in all three areas than their female colleagues (Classroom/Lab Instruction, $M = 3.26$, $SD = .36$; FFA, $M = 3.30$, $SD = .39$; SAE, $M = 3.02$, $SD = .41$).

Table 6

Results from Independent Samples t-tests Measuring Agricultural Education Job Satisfaction Constructs by Gender

Constructs	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	Cohen's <i>d</i>
Male	51	3.47	.56				
Classroom/Lab Construct				2.22	94	.03*	.46
Female	45	3.26	.36				
Male	51	3.57	.54				
FFA Construct				2.81	94	.006*	.47
Female	45	3.30	.39				
Male	51	3.36	.58				
SAE Construct				3.29	94	.001*	.58
Female	45	3.02	.41				

Note. $\alpha = .05$. *Designates statistically significant *p* value. The Likert scale ranged from 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*.

We used an independent samples *t*-test to assess gender-based differences in job satisfaction using the five factors evaluated in AJDI. Overall, the analysis suggested there are statistically significant gender-based differences in the Promotion $t(94) = 2.37$, $p = .02$ and Coworkers constructs $t(94) = 3.89$, $p < .001$ (see Table 7). The Promotion construct produced a medium effect size (Cohen's $d = .49$), and the Coworkers factor produced a large effect size (Cohen's $d = .80$) measured by the recommendation of Cohen (1988). Additionally, male agricultural educators rated their job satisfaction higher in the Promotion (Male, $M = 3.00$, $SD = .79$; Female, $M = 2.66$, $SD = .56$) and Coworkers constructs (Male, $M = 3.93$, $SD = .67$; Female, $M = 3.45$, $SD = .52$) than female agricultural educators. The gender-based differences in the Work, Compensation, and Supervisors constructs produced statistically non-significant results.

Table 7

Results from Independent Samples *t*-test Comparing Differences in Workplace Condition Job Satisfaction Constructs by Gender

Constructs	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	Cohen's <i>d</i>
Male	51	3.90	.48				
Work Construct				1.95	94	.06	.40
Female	45	3.71	.46				
Male	51	2.88	.82				
Compensation Construct				1.88	94	.06	.38
Female	45	2.61	.59				
Male	51	3.00	.79				
Promotion Construct				2.37	94	.02*	.49
Female	45	2.66	.56				
Male	51	3.93	.67				
Coworkers Construct				3.89	94	<.001*	.80
Female	45	3.45	.52				
Male	51	3.63	.75				
Supervisors Construct				.72	94	.48	.15
Female	45	3.53	.68				

Note. $\alpha = .05$. The Likert scale ranged from 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*.

Research Objective Three

The third research objective assessed statistical differences among agricultural educators in different career phases. We used an ANOVA to evaluate the experience-based differences in job satisfaction. To provide a more robust analysis, the three areas of agricultural education and the five factors measured in the AJDI were evaluated. A *post hoc* analysis using the Bonferroni criterion was conducted to delineate the data further. Overall, the analysis suggested there are statistically significant differences in how the Classroom/Lab Instruction Construct $F(2, 92) = 3.59, p = .03$ and the SAE Construct $F(2, 92) = 4.02, p = .02$ affect early, middle, and late-career stage educator's job satisfaction (see Table 8). The effect size was measured using eta-squared (η^2). The Classroom/Lab Construct produced a medium effect size for the Classroom/Lab Construct ($\eta^2 = .07$) and the SAE Construct ($\eta^2 = .08$). The experience-based differences in the FFA Construct produced a statically non-significant result.

Table 8

Results from Analysis of Variance Comparing Differences in Agricultural Education Constructs by Career Stage

Constructs	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	Between Groups <i>df</i>	Within Groups <i>df</i>	<i>p</i>	η^2
Classroom/Lab Construct	95	3.37	.49	3.59	2	92	.03*	.07
Early Career	38	3.43	.50					
Middle Career	39	3.22	.42					
Late Career	18	3.55	.54					
FFA Construct	95	3.45	.49	1.23	2	92	.30	.03
Early Career	38	3.46	.54					
Middle Career	39	3.37	.41					
Late Career	18	3.58	.55					
SAE Construct	95	3.20	.54	4.02	2	92	.02*	.08
Early Career	38	3.25	.57					
Middle Career	39	3.03	.45					
Late Career	18	3.43	.54					

Note. $\alpha = .05$. *Indicates statistically significant *p* values. The Likert scale ranged from 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*.

The *post hoc* analysis using Bonferroni’s criterion revealed statistically significant differences between how the Classroom/Lab Construct affects middle ($M = 3.22$, $SD = .42$) and late career ($M = 3.55$, $SD = .54$) educator’s job satisfaction ($p = .05$; see Table 9). Additionally, the analysis suggests that there are statistically significant differences ($p = .03$) in how the SAE construct affects middle-career ($M = 3.03$, $SD = .45$) and late-career ($M = 3.43$, $SD = .54$) educator’s job satisfaction (see Table 9).

Table 9

Post Hoc Analysis Comparing Differences in Agricultural Education Job Satisfaction Constructs by Career Stage

Dependent Variable	Career Level	Career Level Comparison	<i>p</i>
Classroom/Lab Construct	Early Career	Middle Career	.16
		Late Career	1.00
	Middle Career	Early Career	.16
		Late Career	.05*
	Late Career	Early Career	1.00
		Middle Career	.05*
FFA Construct	Early Career	Middle Career	1.00
		Late Career	1.00
	Middle Career	Early Career	1.00
		Late Career	.38
	Late Career	Early Career	1.00
		Middle Career	.38

Dependent Variable	Career Level	Career Level Comparison	<i>p</i>
SAE Construct	Early Career	Middle Career	.20
		Late Career	.69
	Middle Career	Early Career	.20
		Late Career	.03*
	Late Career	Early Career	.69
		Middle Career	.03*

Note. $\alpha = .05$. *Indicates statistically significant *p* values. The Likert scale ranged from 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*.

We also used an ANOVA to analyze the job satisfaction of agricultural educators in different career stages. This analysis was conducted using the five factors evaluated in the AJDI. The analysis suggested there were statistically significant differences $F(2, 92) = 4.60, p = .01$ within the Compensation construct for agricultural educators in different career stages (see Table 10). This analysis produced a medium effect size ($\eta^2 = .09$) when measured by the recommendations of Cohen (1988). The experience-based differences in the Work, Promotion, Coworkers, and Supervisors constructs all had statistically non-significant results.

Table 10

Results from Analysis of Variance Comparing Differences in Working Condition Job Satisfaction Constructs by Career Stage

Constructs	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	Between Groups <i>df</i>	Within Groups <i>df</i>	<i>p</i>	η^2
Work Construct	95	3.81	.48	1.89	2	92	.16	.04
Early Career	38	3.77	.52					
Middle Career	39	3.76	.44					
Late Career	18	4.01	.43					
Compensation Construct	95	2.75	.73	4.60	2	92	.01*	.09
Early Career	38	2.76	.77					
Middle Career	39	2.55	.57					
Late Career	18	3.15	.82					
Promotion Construct	95	2.84	.72	1.36	2	92	.26	.03
Early Career	38	2.96	.74					
Middle Career	39	2.70	.64					
Late Career	18	2.88	.81					
Coworkers Construct	95	3.71	.65	1.23	2	92	.30	.03
Early Career	38	3.72	.75					
Middle Career	39	3.61	.57					
Late Career	18	3.89	.59					
Supervisors Construct	95	3.58	.72	1.74	2	92	.18	.04
Early Career	38	3.70	.59					
Middle Career	39	3.41	.75					
Late Career	18	3.67	.87					

Note. $\alpha = .05$. *Indicates statistically significant *p* values. The Likert scale ranged from 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*.

The *post hoc* analysis suggested that there were statistically significant differences ($p = .01$) in how compensation affects middle ($M = 2.66$, $SD = .57$) and late career ($M = 3.15$, $SD = .82$) educator's job satisfaction (see Table 11).

Table 11

Post Hoc Analysis Comparing Differences in Working Conditions Job Satisfaction Constructs by Career Stage

Dependent Variable	Career Level	Career Level Comparison	<i>p</i>
Work Construct	Early Career	Middle Career	1.00
		Late Career	.25
	Middle Career	Early Career	1.00
		Late Career	.22
	Late Career	Early Career	.25
		Middle Career	.22
Compensation Construct	Early Career	Middle Career	.56
		Late Career	.16
	Middle Career	Early Career	.56
		Late Career	.01*
	Late Career	Early Career	.16
		Middle Career	.01*
Promotion Construct	Early Career	Middle Career	.32
		Late Career	1.00
	Middle Career	Early Career	.32
		Late Career	1.00
	Late Career	Early Career	1.00
		Middle Career	1.00
Coworker Construct	Early Career	Middle Career	1.00
		Late Career	1.00
	Middle Career	Early Career	1.00
		Late Career	.37
	Late Career	Early Career	1.00
		Middle Career	.37
Supervisor Construct	Early Career	Middle Career	.25
		Late Career	1.00
	Middle Career	Early Career	.25
		Late Career	.62
	Late Career	Early Career	1.00
		Middle Career	.62

Note. $\alpha = .05$. *Indicates statistically significant *p* values. The Likert scale ranged from 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*.

Conclusions, Implications, and Recommendations

This study aimed to evaluate gender and experience-based differences among agricultural educators. In research objective one, educators suggested that they have a high level of job satisfaction,

with many claiming they sometimes or often feel optimistic about their careers. Additionally, educators reported feeling positive toward all three areas of agricultural education, including FFA, SAE, and classroom instruction. This positive rating of job satisfaction is encouraging to the profession considering issues with teacher attrition (Blackburn et al., 2017; Smith & Smalley, 2018; Sorensen et al., 2016; Traini et al., 2019). Additionally, King et al. (2013) reported that FFA and SAE duties can increase educator workload and cause feelings of burnout in some agricultural educators. The educators in this study did not suggest that FFA and SAE were sources of negative job satisfaction, which differs from the findings of King et al. (2013).

The second objective assessed statistically significant gender-based differences among agricultural educators. The result was that female agricultural educators had significantly lower job satisfaction within the Classroom/Lab Instruction, FFA, and SAE constructs than their male colleagues. Additionally, female agricultural educators rated their job satisfaction significantly lower in the Promotion and Coworker constructs than male educators. The agricultural education profession has experienced a shift in the demographics of educators, with more females entering the profession than in the past (Camp, 1992; NAAE, 2023). This transition may cause challenges for female agricultural educators as they face balancing the profession's demands with other responsibilities, such as family obligations and personal priorities. The findings of this study are contrasted by Gilman et al.'s (2012) study, which found no significant differences in the job satisfaction of male and female agricultural educators in Georgia. Additionally, Sorenson et al. (2017) found that female agricultural educators report working more hours per week than males and that they work more hours on the weekend than their male colleagues. This combination of longer work hours is exacerbated by Sorenson et al.'s (2017) finding that female educators in that study were paid less than male educators. To encourage the retention of a significant portion of the agricultural educator population, ensuring that female agricultural educators are satisfied in their careers is imperative. To find solutions to these issues, exploring avenues to support interdisciplinary collaboration among educators within the school and foster additional relationships within the profession could help female teachers improve their satisfaction with coworker relationships. Additionally, findings ways to improve compensation for female agricultural educators through extended contracts and stipends (Still & Solomonson, 2024) can improve their job satisfaction in those areas, especially since Norris, Swartzel, and McCubbins (2024) found that salary was moderate to strong motivator to remain in the profession. While Sorenson et al.'s (2017) study did find statistically significant differences in the wages between male and female agricultural educators, there was also a substantial difference in the experience levels of educators in that study, with males having, on average, nine more years of experience, than the female in that study. While Sorenson et al.'s (2017) findings suggest salary disparities, these variations in experience could explain some of the differences in compensation. The findings in this study indicate that females are less satisfied with their compensation, and when combined with Sorenson et al.'s (2017) findings, the authors recommend a national salary evaluation of agricultural educators to assess for disparities in compensation.

The third objective assessed statistical differences in how educators in different career stages regard their job satisfaction. The analysis suggested that mid-career educators were significantly less satisfied with aspects of Classroom/Lab Instruction and SAE than their late-career colleagues. Additionally, mid-career educators were less satisfied with their compensation than late-career educators. Solomonson and Retallick (2018) found that mid-career educators struggle with work-family balance due to professional challenges and changing family dynamics. This transitional time in the life of many mid-career educators can limit household financial resources and create time constraints that are followed by burnout (Solomonson & Retallick, 2018). The agricultural education profession is fortunate that many educators are compensated above the standard contract through extended workdays and that many administrators support this additional compensation (Still & Solomonson, 2024). Sorensen et al. (2014) found that educators with six or more years of experience wanted professional development in balancing work-family priorities. This professional development could benefit mid-career educator's job satisfaction by improving their time management skills. Additionally, in a world of limited resources, professional development on managing

personal finances, including debt management, retirement investment options (IRAs, 401k's, etc.), personal finance budgets, and increasing income efficiency could be an effective strategy for improving compensation satisfaction without a salary increase.

The results in objective three suggest that early, mid, and late-career educators are *often* satisfied with their work, supervisors, and coworkers and are *sometimes* satisfied with their compensation and professional promotion opportunities. These results are consistent with the findings of Norris, Swortzel, and McCubbins (2024), who found that agricultural educators are passionate about aspects of their work and that working with motivated students, their attitude toward students, and engaging students were moderately to strongly impactful on their decision to remain in the profession. Furthermore, the educators in this study suggested they were *often* satisfied with their administrators and coworkers. Hasselquist et al. (2017) found that administrators and colleagues had a statistically significant impact on agricultural educator's job satisfaction and that these key individuals were critical to a positive school culture. Solomonson et al. (2019) found that educators who left the profession often cite a lack of administrative support as a foundational reason for seeking out a new career field. Norris, Norris-Parish, and Crayton (2024) found that many top-level district administrators have little to no teaching experience and that it can affect their perceptions of an agricultural educator's professional responsibilities. In cases where the administrator has little to no knowledge of agricultural education, the educator must take the initiative to teach them. The administrator teaching tools offered through professional organizations such as the National Association for Agricultural Educators (NAAE) can be utilized as a positive first step to demonstrating the value of agricultural education. If the administrator has the capacity and willingness to attend impactful SBAE events (FFA conventions, CDE/LDE contests, chapter banquets, SAE visits, etc.), it could improve their perceptions of agricultural education and drive a positive attitude toward its mission.

For agricultural education to remain relevant, the profession must identify ways to recruit and retain quality agricultural educators who are satisfied with their careers and are passionate about educating students. Understanding job satisfaction factors can assist in providing relevant resources, pertinent professional development, and best practices to improve job satisfaction. If SBAE stakeholders can identify and assist educators at risk of exiting the profession early, it could extend agricultural education's influence and ultimately increase the number of students impacted. Furthermore, the results of this study provide ample opportunity for additional scholarly inquiry. We recommend conducting a qualitative study to further evaluate job satisfaction. This could provide greater insight into the perceptions of educators that are not gathered by quantitative means. We also recommend conducting a compensation study to deepen the knowledge of compensation's role in job satisfaction.

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