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Cooperating Teacher Mentorship Behaviors and Job Satisfaction as Predictors of Agricultural Education Interns' Intent to Teach

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Abstract

School-based Agricultural Education has experienced a shortage of qualified teachers, and almost a quarter of agricultural education graduates do not teach upon graduating. To increase the number of qualified teachers entering the classroom, the reasons for this must be identified and addressed. A possible factor contributing to agricultural education interns' decision to not teach may be the mentoring provided by cooperating teachers. This study sought to explore cooperating teacher mentorship and job satisfaction factors' ability to predict spring 2024 interns' intent to teach. A survey instrument using the student teacher view portion of the Cooperating Teacher Best Practices instrument and the Index of Job Satisfaction was administered to agricultural education interns. Interns perceived social support as the highest type of mentorship behavior (M = 4.43, SD = 0.82) and were satisfied with teaching as a job (M = 3.89, SD = 0.58). Three mentorship behavior types and job satisfaction were related to intent to teach. A logistic regression revealed that role modeling and job satisfaction were predictive of intent to teach. We recommend cooperating teachers involve their interns in various tasks beyond classroom teaching and they should be trained on effective mentorship, including role modeling, social support, and professional support behaviors.

Introduction

The United States has experienced a shortage of public-school teachers but, in some states, the data regarding the teaching workforce has been limited (Saenz-Armstrong, 2022a; Saenz-Armstrong, 2022b). Nonetheless, subjects such as math, science, special education, and career and technical education have been identified as experiencing the greatest shortage of teachers (Cross, 2017). In school-based agricultural education (SBAE), the annual teacher supply and demand study has reported numerous unfilled teaching positions, and during the years of 2015-2023 the number of annual SBAE teaching positions lost ranged from 60 to 105 due to factors such as a shortage of qualified teachers (Foster et al., 2016; 2020; 2021; Foster et al., 2022; Foster et al., 2024; Smith et al., 2017; 2018; 2019; 2022; 2023). The lack of SBAE teachers has been attributed to several factors, including retirements, inservice teachers leaving education, and agricultural education graduates never entering the classroom (Smith et al., 2023). According to Foster

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et al. (2024), almost a quarter of agricultural education graduates choose to not enter the SBAE classroom, which is a percentage that has remained consistent over time. Some reasons for student teachers not entering the profession have been identified (Doss et al., 2020; Kasperbauer, 2005; Lawver & Torres, 2011); however, Roberts et al. (2009) found that many preservice teachers' intent to teach changed during their student teaching experience, which indicates aspects within student teaching may likely impact one's decision to teach.

In a teacher preparation program, preservice teachers work with many individuals to develop the skills and knowledge needed to teach effectively; however, the student teaching internship and cooperating teacher have the largest and most impactful roles (Osunde, 1996). Osunde stated that, "Roughly 1/3 (33%) of the student teacher's time of a teacher education program is spent with the cooperating teacher" (p. 612). Cooperating teachers function as a mentor to their intern guiding them in lesson planning, teaching, assessing student learning, and managing the classroom (Darling-Hammond et al., 2005). According to Shollen et al. (2014), mentors can affect mentees' job satisfaction and productivity through their behaviors, mentorship, and relationships. Due to the extensive time interns spend with their cooperating teacher and the impact the cooperating teacher may have on the intern during student teaching, it is important to understand the dynamics of this relationship and how it impacts interns' decision to teach. Thus, this study sought to examine the impact cooperating teachers' mentorship behaviors have on student teaching interns' intent to teach.

Literature Review

Limited research explaining agricultural education interns' intent to teach has been conducted and results have identified only a few factors impacting this decision. Identified variables related to interns' intent to teach have included interns' previous agricultural experiences (Eck et al., 2021; Kasperbauer, 2005; Roberts et al., 2009), their beliefs about the profession, intrinsic motivation for teaching (Lawver & Torres, 2011), and factors within the student teaching internship (Doss et al., 2020; Frost & Rayfield, 2020; Lawver & Torres, 2011; Roberts et al., 2009). Researchers have found mixed results related to the impact of interns' previous SBAE experience on the intent to teach (Eck et al., 2021), while factors related to the student teaching experience have been the most influential on the decision. Doss et al. (2020) conducted a study to examine the relationship between time spent on various tasks and interns' decision to teach and found time spent grading or scoring students' work had the strongest relationship. Additionally, Lawver and Torres (2011) found that interns' beliefs and attitudes about teaching explained some of the variance in interns' intent to teach. Their study pointed to elements related to job satisfaction; however, it has been unclear how cooperating teacher mentorship factors into this.

The student teaching internship provides an opportunity for preservice teachers to gain context-specific, classroom teaching experience (Stephens & Whittington, 2010), including planning and presenting daily lessons, evaluating student learning, and balancing the many duties of a teacher. Research has shown that a variety of experiences during student teaching can help improve student teachers' competency and self-efficacy (McKim & Velez, 2016; Tschannen-Moran et al., 1998). The widely accepted format for student teaching consists of at least 10 weeks of full-time intern placement, interns share cooperating teachers' responsibilities, and feedback is provided to the intern by the cooperating teacher and the university supervisor (Greenberg et al., 2011). As summarized by Darling-Hammond et al. (2005), the student teaching internship is most beneficial when interns "are supported by purposeful coaching from an expert cooperating teacher in the same teaching field who offers modeling, coplanning, frequent feedback, repeated opportunities to practice, and reflection upon practice while the student teacher gradually takes on more responsibility" (p. 409).

Consequently, cooperating teacher behaviors can impact an intern's student teaching experience and subsequent career. Cooperating teachers' instructional effectiveness has been correlated with the

instructional effectiveness of interns, even beyond their first year of teaching (Osunde, 1996; Ronfeldt et al., 2018). Additionally, interns received higher observational ratings when their cooperating teacher received higher observational ratings, as interns felt pressure to conform to the teaching behaviors of their cooperating teachers (Anderson, 2007). Furthermore, Edgar et al. (2011) found the level of relationship between interns and cooperating teachers has been related to higher teaching efficacy among interns. Because cooperating teachers' behaviors have a large impact on the success of the experience, a clear need exists for the cooperating teacher to effectively communicate, provide feedback, and support the intern's learning (Anderson, 2007; Darling-Hammond et al., 2005).

One key aspect of support for interns has been the mentorship provided by cooperating teachers (Stephens & Whittington, 2010), which can impact novice teachers' decision to remain in the profession (Kelly et al., 2019). Mentorship was operationally defined for this study as the behaviors utilized by cooperating teachers relating to the social support, professional support, and role modeling provided to student teaching interns (Nesbitt & Barry, 2023). Social support behaviors include consistent and frequent communication indicating to the intern the cooperating teacher cares about their problems (Nesbitt & Barry, 2022a), while professional support relates to the cooperating teacher helping the intern navigate the professional world of teaching and the relationship building required to be an effective teacher (Nesbitt & Barry, 2022b). Lastly, role modeling refers to all aspects of teaching the cooperating teacher positively models for the intern, supplemented with an explanation of the cooperating teacher's metacognitive processes regarding their decisions (Nesbitt & Barry, 2022c). Nesbitt and Barry (2023) examined SBAE cooperating teacher mentoring behaviors to identify the impact mentorship can have on interns and found interns were more likely to feel positively about their student teaching internship and were more likely to remain in the profession (Nesbitt & Barry, 2022a; 2022b; 2022c). Frost and Rayfield (2020) and Kasperbauer (2005) determined that interns believed the cooperating teacher/intern relationship was of high importance but noted that it was not predictive of an interns' decision to teach. While these studies determined that the cooperating teacher/intern relationship was important and has an impact on the intern, the concepts of relationship and mentorship behaviors are conceptually different. Consequently, the relationship may not affect intent to teach, but mentorship behaviors could.

Job satisfaction has been identified as another potential factor impacting intent to teach (Lawver & Torres, 2011). Toropova et al. (2021) described job satisfaction as the level to which an individual perceived their needs being met related to their job, and since individuals spend a large portion of time at their place of employment, satisfaction is vitally important. Herzberg et al.'s (1959) Two-Factor Theory categorized job satisfaction into motivation and hygiene factors. Motivation factors are characteristics of a job that appeal to an individual's need for growth and self-actualization and help increase job satisfaction, whereas hygiene factors are related to attributes of the job out of an individual's control affecting job dissatisfaction (Alshmemri et al., 2017). Herzberg et al. (1959) proffered that motivation factors are intrinsic and include the potential for advancement, nature of the work, the possibility of growth, responsibility, recognition, and achievement. When considering the importance of motivation factors for employees, Ihensekien and Joel (2023) stated that motivation not only drives the achievement of goals but also is key in worker productivity. Five factors related to hygiene included interpersonal relationships, salary, company policies and administration, supervision, and working conditions (Alshmemri et al., 2017).

Accordingly, teacher job satisfaction is affected by many motivation and hygiene (Herzberg et al., 1959) factors, including personal factors external from teaching, as well as elements within the school (Jorde-Bloom, 1986; Toropova et al., 2021). Early positive job satisfaction, which can start during the student teaching internship, has been linked with lower rates of teacher attrition among new teachers (Lam et al., 1995). Without job satisfaction, teachers may experience withdrawal cognition (Lam et al., 1995), eventually leading to attrition (Kelly et al., 2019; Mobley, 1977; Wiens & Ruday, 2014). When examining working conditions within the school, Toropova et al. (2021) noted these conditions not only impact teacher satisfaction, but student learning and teacher effectiveness. Higher instances of professional support were

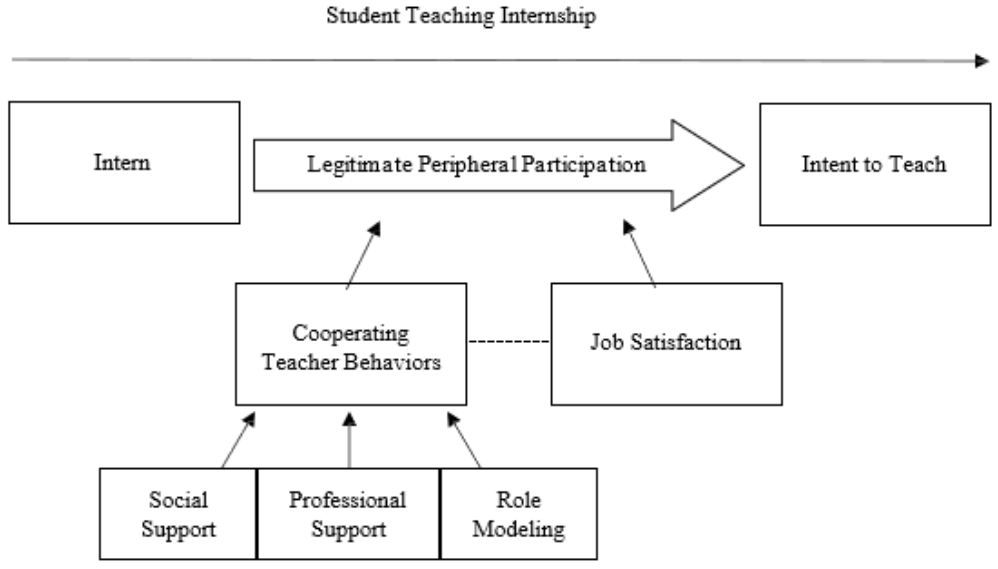
found to be common among schools where teacher attrition rates were lower as compared to schools without professional support (Toropova et al., 2021). Kelly et al. (2019) also linked teacher job satisfaction with factors such as workload, teachers' relationships with students and parents, personal control and decision power, and possibilities for growth. While all motivation and hygiene factors may not directly apply to the student teaching internship, theoretically, interns' attitudes toward teaching should in part be affected by job satisfaction.

Conceptual Framework

The conceptual framework (Figure 1) for this study was adapted from the Model of Factors Affecting Intent to Teach (Kasperbauer, 2005), which depicts the relationship between the cooperating teacher and intern and the intern's intent to teach through the lens of legitimate peripheral participation (Lave & Wenger, 1991). Legitimate peripheral participation refers to the process where newcomers participate in the practice of the community to gain the necessary knowledge to be considered members of the community (Lave & Wenger, 1991), which theoretically could have an impact on decision to teach. As part of the legitimate peripheral participation process, cooperating teachers can play a role in assimilating student teachers into the profession. In her study, Kasperbauer operationalized the cooperating teacher/intern relationship using teaching behaviors associated with cooperating teacher effectiveness. Kasperbauer found no relationship between the cooperating teacher/intern relationship and interns' intent to teach; however, the cooperating teacher/intern relationship may contain other factors beyond what was measured (Kasperbauer, 2005; Nesbitt & Barry, 2023). Furthermore, job satisfaction (Herzberg et al., 1959; Lawver & Torres, 2011), may impact interns' decision to teach. Accordingly, job satisfaction was added to the model, and the cooperating teacher/intern relationship was expanded to encompass the cooperating teacher mentorship behaviors of social support, professional support, and role modeling (Nesbitt & Barry, 2023). Also depicted in the model was a potential relationship between cooperating teacher mentorship behaviors and job satisfaction, as the behaviors exhibited by the cooperating teacher may have an impact on the level of satisfaction/dissatisfaction the intern feels towards the teaching profession.

Figure 1

Adjusted Model of Factors Affecting Intent to Teach (Adapted from Kasperbauer, 2005)



Purpose

Based on the adjusted Kasperbauer (2005) Model of Factors Affecting Intent to Teach and previous literature found on the cooperating teacher/intern relationship and mentoring, it is reasonable to assume that intern job satisfaction and cooperating teacher mentorship behaviors could impact the intern's intent to teach. Therefore, the purpose of this study was to explore mentorship and job satisfaction factors' ability to predict interns' intent to teach. The following research objectives guided this study:

1. Determine the employment intentions of spring 2024 Agricultural Education interns.
2. Describe spring 2024 Agricultural Education interns' perceptions of their cooperating teachers' mentorship behaviors.
3. Describe spring 2024 Agricultural Education interns' perceived job satisfaction.
4. Examine the relationships among interns' perceived cooperating teacher mentorship behaviors, job satisfaction, demographic variables, and intent to teach agriculture.
5. Predict spring 2024 Agricultural Education interns' intent to teach based on perceived cooperating teacher mentorship behaviors, job satisfaction, and demographic variables.

Methods

The population of interest for this correlational (McMillan & Schumacher, 2010) study was all agricultural education student teaching interns in the United States during the spring 2024 semester. Random cluster sampling of universities offering an Agricultural Education bachelor's degree program in the United States was utilized. Universities were sorted by NAAE region, randomly ordered, and selected. Based on an estimated population size of 700 interns using the latest National Agricultural Education Supply and Demand Studies (Foster et al., 2020; 2021; Smith et al., 2022; 2023), Israel (1992) indicated the appropriate sample size should be 255.

Upon IRB approval, agricultural education program coordinators from each university were contacted to request a list of email addresses for spring 2024 interns; additional universities were contacted when a program coordinator declined to provide email addresses for their interns. At the midpoint of the spring semester, all interns from universities providing contact information were contacted to complete an online Qualtrics questionnaire. The timing of the survey administration was chosen to give interns an opportunity to have experienced the mentorship behaviors of their cooperating teachers, as well as potentially make decisions about intent to teach as teaching positions began to open. Contact and follow-up procedures described by Dillman et al. (2009) were used. A total of 353 interns were contacted from NAAE Region I (3 universities), Region II (13 universities), Region III (5 universities), Region IV (6 universities), Region V (8 universities), and Region VI (3 universities). A total of 103 participants responded, yielding a response rate of 29.2%.

The instrument for this study combined the student teacher perception component of Nesbitt and Barry's (2023) cooperating teacher best practices [mentorship behaviors] instrument with Brayfield and Rothe's (1951) index of job satisfaction. Measures for intent to teach (1 item) and demographics (17 items) were also included. In total, the instrument contained 53 items. As these were previously constructed and tested instruments, they were deemed as valid (Nesbitt & Barry, 2023; Brayfield & Rothe, 1951); however, the instrument was reviewed by two agriculture teacher educators at the University of Arkansas and deemed valid for the study. Nesbitt and Barry (2023) reported acceptable reliability (α = .96) for the mentorship behaviors scale. *Post hoc* reliabilities were calculated for each mentorship construct with α = .83 for social support, α = .89 for professional support, and α = .92 for role modeling. The *post hoc* reliability calculation for the job satisfaction scale produced a Cronbach's alpha of .91.

The mentorship behaviors scale (Nesbitt & Barry, 2023) asked participants to rate the frequency of their cooperating teacher's mentorship behaviors related to social support, professional support, and role modeling on a 5-point Likert type scale from *not at all* to *more than once a week*. The 18 items measuring job satisfaction were rated on a 5-point Likert type scale from *strongly disagree* to *strongly agree*. Intent to teach for fall 2024 was measured with five options: 1) I already have a job teaching SBAE for fall 2024, 2) I am actively searching for a job teaching SBAE for fall 2024 (submitting applications, interviewing, etc.), 3) I intend to find a job teaching SBAE for fall 2024, 4) I am unsure if I will pursue a job teaching SBAE for fall 2024, and 5) I do not intend to pursue a job teaching SBAE for fall 2024. Options one through three were coded as interns having an intent to teach and the last two options were coded as not intending to teach. If interns indicated they did not intend to teach, they were asked their plans after graduation.

Data were analyzed using Statistical Package for Social Sciences (SPSS) version 28. Significance levels were set *a priori* at .05. Descriptive statistics including measures of central tendency, frequencies, and summated means were calculated for objectives one, two, and three. Objective four utilized Pearson Product Moment and Point Biserial correlations, and the magnitude of correlations was classified using conventions set forth by Davis (1971). Lastly, a binary logistic regression was used to determine if variables significantly correlated to intent to teach were significant predictors of intent to teach.

Results

Demographic variables revealed the ages of respondents ranged from 20 to 49 years old (M = 22.92, SD = 4.57). Most interns identified as female (n = 83, 80.6%,), Caucasian (n = 96, 93.2%,), and indicated they participated in a youth agricultural program before middle school (n = 67, 65.0%,). Few interns had less than four years of experience as a student in a middle school or high school SBAE program (n = 18, 17.5%,). Most respondents were from NAAE Regions II (n = 40, 38.8%,) and V (n = 29, 28.2%). Interns reported their cooperating teachers had 3 to 40 years of teaching experience (M = 15.75, SD = 9.00). Most cooperating teachers were male (n = 55, 53.4%,) and Caucasian (n = 101, 98.1%). Student teaching placement sites were mostly located in rural settings (n = 66, 64.1%,); urban was the least frequent (n = 8, 7.8%,). Information regarding student teaching placement site characteristics is reported in Table 1.

Table 1

Spring 2024 Student Teaching Placement Site Characteristics

	Lower Limit	Upper Limit	*M*	*SD*
Number of Students in Program	20	850	179.38	147.76
Number of Teachers in Program	1	6	2.28	1.27
Class Periods Taught	2	8	5.12	1.67
Different Courses Taught	1	7	3.74	1.42
Number of Tasks Outside of Classroom Responsibilities	1	8	4.16	1.43

Objective one was to identify the employment intentions of spring 2024 agricultural education interns (Table 2). Most participants (n = 80, 77.7%) either had a teaching job for fall 2024 or had intentions of getting a teaching job for fall 2024. If "I do not intend to pursue a job teaching SBAE for fall 2024" was selected, interns were prompted to describe their post-graduation plans. Plans after graduation included pursuing a master's degree before teaching, pursuing a master's degree and then a job outside of teaching, finding a job in agriculture besides teaching, and traveling.

Table 2

Teaching Intentions of Spring 2024 Agricultural Education Interns (n = 103)

Intent to Teach	*f*	%
I already have a job teaching SBAE for fall 2024	15	14.6
I am actively searching for a job teaching SBAE for fall 2024	53	51.5
I intend to find a job teaching SBAE for fall 2024	12	11.6
I am unsure if I will pursue a job teaching SBAE for fall 2024	12	11.6
I do not intend to pursue a job teaching SBAE for fall 2024	11	10.7

Objective two was to describe spring 2024 agricultural education interns' perceptions of how frequently their cooperating teachers utilized various mentoring behaviors. As indicated by summated mean scores, interns perceived cooperating teachers exhibited social support ($M = 4.43$, $SD = 0.82$), professional support ($M = 3.87$, $SD = 1.07$), and role modeling ($M = 3.96$, $SD = 1.13$) mentorship behaviors at least once per week. Frequencies of responses for each item comprising the three mentorship behavior scales can be found in Table 3.

Table 3

Item Frequencies for Spring 2024 Intern Perceptions of Mentorship Behaviors (n = 103)

Cooperating Teacher Behavior	Infrequently	Somewhat Frequently	Frequently
	%	%	%
Social Support Behaviors			
My cooperating teacher communicated regularly with me.	1.95	1.90	96.1
My cooperating teacher communicated openly with me.	2.91	3.88	93.2
My cooperating teacher was attuned to my mindset, attitude, and well-being.	9.71	6.80	83.50
I was provided weekly comprehensive feedback on performance in an uninterrupted setting.	16.50	13.60	69.90
Professional Support Behaviors			
My cooperating teacher used observational data as the basis for feedback sessions.	19.41	19.41	61.16
I was encouraged to take the lead in evaluating my own teaching.	11.65	8.74	78.64
My cooperating teacher made an effort to introduce me to the school community.	10.68	17.48	71.84
My cooperating teacher made an effort to help me develop positive views of teaching.	13.59	7.77	78.64
My cooperating teacher shared approaches for effectively managing the administrative aspects of teaching, including building effective relationships with administrators and other teachers.	21.36	10.68	67.96
I was encouraged by my cooperating teacher to maintain active memberships in agriculture teacher professional organizations.	31.07	15.53	53.40
My cooperating teacher shared strategies for	23.30	13.59	63.10

Cooperating Teacher Behavior	Infrequently	Somewhat Frequently	Frequently
	%	%	%
effectively managing time, priorities/projects, and email.			
Role Modeling Behaviors			
My cooperating teacher involved me in all their roles as a teacher.	10.68	3.88	85.44
My cooperating teacher talked to me about how to become an excellent teacher through all phases of my career.	16.50	10.68	72.82
My cooperating teacher shared their approaches for SAE program development and supervision.	22.33	20.39	57.28
My cooperating teacher shared their philosophy for FFA advising.	20.39	13.59	66.02
My cooperating teacher coached me on strategies for developing a positive rapport with students.	16.50	11.65	71.84
My cooperating teacher discussed effective student discipline strategies with me for maintaining a productive learning environment.	11.65	19.42	68.93

Note. Response categories combined: Infrequently = *less than once a month* or *not at all* and *once a month*; Somewhat Frequently = *more than once a month, but less than once a week*; Frequently = *once a week* or *more than once a week*

Objective three was to describe spring 2024 agricultural education interns' perceived job satisfaction. For objective three, interns had an average summated job satisfaction score of 3.89 (*SD* = 0.58) ranging from 2.56 to 4.94. The frequencies of responses for each of the 18 items are reported in Table 4.

Table 4

Item Frequencies for Spring 2024 Agricultural Education Intern Job Satisfaction (n = 103)

Item	Disagree	Neutral	Agree
	%	%	%
Teaching is like a hobby to me.	29.13	33.98	36.89
Teaching is usually interesting enough to keep me from getting bored.	4.85	7.77	87.38
It seems that my friends are more interested in their jobs. (R)[A]	53.92	32.35	13.73
I consider teaching rather unpleasant. (R)	80.58	14.56	4.85
I enjoy teaching more than my leisure time.	46.60	28.16	25.24
I am often bored with teaching. (R)	79.61	16.50	3.88
I feel fairly well satisfied with teaching.	6.80	12.62	70.87
Most of the time I have to force myself to go teach. (R)	79.61	7.77	12.62
I am satisfied with teaching for the time being.	2.91	16.50	80.58
I feel that teaching is no more interesting than other jobs I could get. (R)	62.14	16.50	21.36
I definitely dislike teaching. (R)	86.41	12.62	0.97
I feel that I am happier in teaching than most other people are in their jobs.	12.62	19.42	67.96
Most days I am enthusiastic about teaching.	4.85	9.71	85.44
Each day of teaching seems like it will never end. (R)	72.82	13.60	13.60
I like teaching better than the average worker likes their job.	10.68	25.24	64.08
Teaching is pretty uninteresting. (R)	88.35	6.80	4.85
I find real enjoyment in teaching.	2.91	9.71	87.38
I am disappointed that I ever started teaching. (R)	87.38	8.74	3.88

[A]$n = 102$.

Note. Response categories combined: Disagree = *Strongly Disagree* or *disagree*; Neutral = *Neither Agree nor Disagree*; Agree = *Strongly Agree* or *Agree*. Reverse-coded items are denoted with an (R).

Objective four was to examine relationships among perceived cooperating teacher social support behaviors, professional support behaviors, role modeling behaviors, interns' job satisfaction, demographic variables, and interns' intent to teach agriculture. Correlations are summarized in Table 5. No demographic variable had a significant relationship with intent to teach, perceived role modeling, or job satisfaction. However, gender had a significant, low positive relationship with both perceived social support ($r = .20$, $p = .041$) and perceived professional support ($r = .20$, $p = .040$). The number of tasks in which student teachers participated outside of the classroom had a significant, low, positive correlation with perceived professional support ($r = .29$, $p = .003$), perceived role modeling ($r = .28$, $p = .005$), and job satisfaction ($r = .29$, $p = .003$), but was not significantly related to perceived social support. Perceived social support, perceived professional support, and perceived role modeling each had a significant, low, positive relationship with intent to teach, while job satisfaction and intent to teach had a significant, moderate, positive relationship ($r = .44$, $p < .001$). Job satisfaction was significantly, positively, and moderately related to each type of mentorship behavior.

Table 5

Relationships Between Intent to Teach, Perceived Mentorship Behaviors, Job Satisfaction, and Selected Demographic Variables

Variable	1	2	3	4	5	6	7
1. Intent to Teach[a]	-	.196*	.219*	.293*	.442**	.107	.076
2. Social Support[b]		-	.755**	.715**	.316**	.165	.201*
3. Professional Support[b]			-	.891**	.362**	.294**	.202*
4. Role Modeling[b]				-	.338**	.275**	.184
5. Job Satisfaction[c]					-	.293**	-.017
6. Number of Tasks						-	.050
7. Gender[d]							-

[a]no = 0, yes = 1. [b]Summated scale where 1 = *less than once a month or not at all* and 5 = *more than once a week.* [c]Summated scale where 1 = *strongly disagree* and 5 = *strongly agree.* [d]female = 0, male = 1. *p < .05. **p < .01.

Finally, objective five was to predict agricultural education interns' intent to teach based on perceived cooperating teacher social support behaviors, professional support behaviors, role modeling behaviors, perceived job satisfaction, and demographic variables. Values for the predictor variables were standardized as Z-scores and used in the regression to determine odds ratios. The logistic regression model was statistically significant ($\chi^2(4) = 25.309$, $p < .001$) and explained 21.8% (Cox and Snell R^2) of the variance in intent to teach. Role modeling and job satisfaction were significant predictors of intent to teach. Every one standard deviation increase in perceived role modeling was associated with interns being 3.84 ($\chi^2(1) = 4.254$, $p = .039$) times as likely to have an intent to teach agriculture. Every one standard deviation increase in job satisfaction was associated with interns being 3.18 ($\chi^2(1) = 13.421$, $p < .001$) times as likely to have an intent to teach agriculture. Interns who perceived their cooperating teachers exhibited more role modeling behaviors and who experienced higher job satisfaction were significantly more likely to pursue a career in agricultural education.

Conclusions/Discussion

The data collected for this study were self-reported measures, possibly affecting the accuracy of the results. Additionally, the potential for nonresponse bias exists between individuals who responded and those who did not. Due to limitations of the study, the results should not be generalized beyond the sample. However, Johnson and Shoulders (2017) suggested, "studies yielding valid results of interest to the profession from a specific groups [*sic*] of respondents, regardless of their generalizability, can add to the body of knowledge and assist researchers as they design and conduct research" (pp. 310-311).

The average participant was Caucasian, female, and around 23 years of age. Additionally, the average participant had experience in a youth agricultural program and was involved in agricultural education at the middle school or high school level for at least 4 years. While Smith et al. (2023) did not report age, this study's findings are congruent with their study in that the majority of agricultural education graduates were Caucasian and female. In contrast with the interns, the average cooperating teacher was Caucasian, male, and had 15.75 years of experience teaching. There was a large range in the number of students and teachers at each placement site, with the average placement site being small, with two teachers and less than 200 students. Additionally, most placement sites were situated in rural communities. Each intern taught about five class periods, but only about four unique courses, indicating interns typically had at least one course they taught more than one class period.

Most interns were actively looking for a job at the time of the survey and just under a quarter indicated they did not intend to find a job teaching agriculture or were unsure of their desire to find a job,

which is similar to previous findings (Foster et al, 2024; Roberts et al., 2009; Smith et al., 2023). Most respondents who did not intend to teach upon graduation planned to continue their education by pursuing a master's degree. While not all interns planned to teach after graduation, several indicated their continuing education would be in agricultural education and they specifically planned to teach agriculture upon graduation with their master's degree.

Of the three cooperating teacher mentorship behaviors, social support behaviors were most frequently reported by the interns, with professional support being the least frequent. Of all the items related to cooperating teacher mentorship behaviors, 9 were observed by a majority of interns more than once a week. Three of these four common behaviors were related to social support. Out of the four least frequently observed mentorship behaviors, three were professional support behaviors. Perhaps cooperating teachers were more adept at exhibiting social support behaviors than professional support behaviors. Overall, interns *agreed* they were satisfied with teaching. The majority of interns strongly disagreed with the two items "I definitely dislike teaching" and "I am disappointed that I ever started teaching."

Objective four was to determine relationships between mentorship behaviors, job satisfaction, demographic variables, and intent to teach. Interestingly, research has shown that the cooperating teacher/intern relationship was not an indicator of interns' intent to teach (Frost & Rayfield, 2020; Kasperbauer, 2005). While the cooperating teacher/intern relationship is different than mentorship behaviors, there are similarities between the variables, and in this study the mentorship behaviors of social support, professional support, and role modeling were all significantly, positively related to interns' intent to teach. Theoretically, these mentorship behaviors should strengthen the legitimate peripheral participation of interns, as they help inculcate the intern into the teaching community (Lave & Wenger, 1991). Additionally, findings support the adapted Kasperbauer (2005) model that mentorship and job satisfaction are related, and mentorship and job satisfaction are related to interns' intent to teach. The relationships found between job satisfaction and mentorship behaviors also support Nesbitt and Barry's (2022a; 2022b; 2022c) reports that interns are more likely to feel positively about their student teaching experience when mentorship supports are in place.

Job satisfaction was positively related to the number of tasks outside of the classroom interns participated in, indicating that interns who participated in a greater number and variety of tasks associated with SBAE were more satisfied with teaching as a career. The data from this study does not allow for determination of causality, and it is possible that student teachers with higher levels of satisfaction were willing to take on more tasks. Nonetheless, this finding is supportive of Herzberg et al.'s (1959) theory, as job responsibilities and nature of the work are considered motivational factors. Taking on additional tasks can help student teachers improve their competence and improve achievement, which also contributes to job satisfaction (Herzberg et al., 1959). Since early career satisfaction can prevent new teachers from leaving education (Lam et al., 1995), finding ways to improve satisfaction may be a way to prevent attrition of graduates and early career teachers. While this study found the number of tasks interns participated in was related to job satisfaction, the number of tasks in which an intern participated was not related to intent to teach, congruent with findings of Doss et al. (2020). Additionally, this study found that previous experience with middle school or high school agriculture programs and engagement in youth agricultural programs were not related to interns' intent to teach. This finding was mixed when compared to previous literature; it supported Roberts et al.'s (2009) findings that previous agricultural experience is not a predictor of intent to teach, however it did not support Kasperbauer (2005) and Eck et al.'s (2021) findings that previous SBAE experience is predictive of interns' intent to teach. Additionally, correlations between job satisfaction and intent to teach support Lawver and Torres' (2011) findings that interns' attitudes and beliefs about teaching are related to their decision to teach.

Objective five sought to predict agricultural education interns' intent to teach based on variables significantly related to intent to teach. A binary logistic regression was run using perceived social support,

perceived professional support, perceived role modeling, and job satisfaction as predictor variables. The regression model found that role modeling and job satisfaction were predictive of an intern's intent to teach, while social support and professional support, though correlated, were not predictive of intern's intent to teach. This supports portions of the adapted conceptual model (Kasperbauer, 2005) that certain mentorship behaviors and job satisfaction during the student teaching internship can affect an intern's intent to teach. However, it does not support the full adapted model, as not all types of mentorship behaviors were predictive of agricultural education interns' intent to teach.

Recommendations

Based on the results of this study, several recommendations for practice can be made. First, we recommend university supervisors communicate to cooperating teachers the need to involve interns in various activities outside of the classroom such as training Leadership Development Events, Career Development Events, advising the FFA chapter officer team, helping with students' Supervised Agricultural Experience programs, and attending meetings. The gradual addition of these types of tasks can help student teachers further develop their competency in all areas of the SBAE program, aiding in increased self-efficacy and job satisfaction (Tschannen-Moran et al., 1998), which could impact intent to teach and potentially reduce attrition early in their careers (Lam et al., 1995). However, McKim and Velez (2016) cautioned that overloading student teachers with multiple experiences too quickly could be detrimental for self-efficacy. Immersion in all experiences in a complete SBAE program also gives interns a more realistic view of the duties of an agriculture teacher beyond the classroom and helps improve their legitimate peripheral participation. Additionally, cooperating teachers should reflect with interns about their approach to Supervised Agricultural Experiences, building student rapport, FFA advisement, and strategies for effectively managing their time, as these are factors attributed to positive role modeling.

Additionally, we recommend cooperating teachers be trained in effective mentorship, including role modeling, social support, and professional support behaviors, which supports Nesbitt and Barry's (2023) earlier work. Since many cooperating teachers have not been trained on how to be effective mentors, implementing mentorship training could help increase their mentorship capabilities. Increased mentorship ability could increase interns' perceptions of their cooperating teacher's mentorship behaviors, increase job satisfaction, and, potentially, intent to teach. Professional development for cooperating teachers should be ongoing and could be modeled after programs such as the University of Florida's Agricultural Education and Communication cooperating teacher mentorship program (Nesbitt & Barry, 2023).

We recommend this study be replicated with specific attention to the timing during the internship in which data is collected to allow adequate time for the intern to make their decision about teaching. Additionally, special attention should be given to obtaining an adequate sample size to increase the generalizability of results on this topic and statistical power to predict. Furthermore, it may be beneficial to longitudinally study participants to determine whether job satisfaction and perceived role modeling behaviors during the student teaching internship have an impact on retention of graduates as early career teachers. Future studies related to agricultural education interns' intent to teach should focus on factors prior to the student teaching internship and graduates who did not pursue a teaching career, as previous research found that many interns enter the student teaching internship knowing whether or not they will teach (Roberts et al., 2009). Finally, since job satisfaction was a significant predictor of intent to teach, studies should determine factors impacting interns' job satisfaction. This information could inform universities and cooperating teachers on best practices to help increase interns' job satisfaction and increase the likelihood of interns entering the teaching field upon graduation.

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