Journal of Agricultural Education, 63(3), 183-196
https://doi.org/10.5032/jae.2022.03183

The Perceptions of School-Based Agriculture Teachers on Extended Contracts

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Abstract

Agricultural education, like many other disciplines, is experiencing a shortage of school-based agricultural education (SBAE) teachers. We examined the perceptions of Pennsylvania SBAE teachers regarding extended contracts as they have been identified as a possible tool to improve recruitment and retention. The purpose of the study was to sample SBAE teachers in Pennsylvania to analyze their perceptions of extended contracts' impact on teachers, programs, and the profession. To do so, data were collected from a survey and interviews of SBAE teachers. Survey results revealed SBAE teachers perceive extended contracts to affect recruitment and retention of the profession. Additionally, extended contracts are perceived to be beneficial to the teacher and their program. Qualitative analysis of the interview participants identified three major themes including the need for extended contracts, the lack of knowledge provided on extended contracts, and the desire for consistency across the state.

Keywords: school-based agricultural education; extended contracts; recruitment; retention

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Introduction and Literature Review

The term ‘teacher shortage is defined as “an insufficient production of new teachers given the size of student enrollments and teacher recruitment,” (Sutcher et al., 2019). However, the shortage is not only due to the lack of new teachers, but also due to compensation, working conditions, turnover rates, and burnout (Sutcher et al., 2019). Currently, the United States is experiencing a national teacher shortage in a range of areas from core subjects such as mathematics to more specialized areas like career and technical education (U.S. Department of Education Office of Postsecondary Education, 2017). School-based agricultural education (SBAE) is no different as there is a shortage of SBAE teachers across the United States (Eck & Craig, 2019; Murray et al., 2011; Lawver et al., 2018). Districts are struggling to fill positions as post-secondary institutions do not have enough graduates to fill them (Foster et al., 2020). It has become difficult to recruit and retain SBAE teachers with the graduates the discipline has obtained due to the complex responsibilities that come with the implementation of the three-circle model of FFA, Supervised Agricultural Experiences (SAE), and classroom instruction (National FFA Organization, 2020; Talbert et al., 1994). Responsibilities include working in and out of the

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classroom due to teaching agricultural curriculum, coaching Career Development Events (CDE), and attending FFA and SAE events (Talbert et al., 1994). Specifically, in SBAE, the lack of compensation, personal factors, teacher development, and working conditions affect recruitment and retainment of teachers in the profession (McIntosh et al., 2018; Solomonson et al, 2018; Tippens et al., 2013). Various states have implemented or encouraged extended contracts to serve as an incentive to recruit and retain SBAE teachers (Idaho Agricultural Teachers Association, 2015; Illinois State Board of Education [ISBE], 2017; Schultz, et al., 2019). Without a national mandate, the incentive can look different based on the district and state, but at their core, they compensate educators for their time outside of the general 180-day school year. When first introduced, SBAE teachers preferred extended contracts in the form of a summer contract which allowed teachers to dedicate more time to SAE through visits and trainings (Dyer & Williams, 1997). Today, there are a diverse array of extended contracts beyond the traditional summer contract.

Literature shows extended contracts are typically framed as summer contracts, stipends, or an extended amount of set days or months (Idaho Agricultural Teachers Association, 2015; ISBE, 2017; Schultz, et al., 2019). Two unique examples of extended contracts are found in Illinois and Kentucky. In Illinois, extended contracts are optional for districts to implement through the Three-Circle Extended Contract Grant. The grant provides funds through the Agriculture Education Line Item in the State of Illinois budget by partnering with districts on 60-day extended contracts for full-time, middle, and secondary SBAE teachers employed through public schools. The first two years of the extended contract is paid fully by the grant. During the third and fourth year, the grant provides 75% of the funds while the district provides the rest. From year 5 on, the grant and district split the cost (ISBE, 2017). This is unique as it allows districts and SBAE teachers the choice to have extended contracts as well as funding for the districts who want to participate. Kentucky statutes require SBAE teachers to be allotted the same number of working days as the school principal. As a result, SBAE teachers are allotted 2.5 more months of working days than traditional teachers (Schultz, et al., 2019). Recruitment and retention factors of agricultural education and the effectiveness of extended contracts must be reviewed to understand the need for extended contracts.

Factors Affecting Recruitment and Retention of Agriculture Teachers

The lack of teacher compensation has taken a toll on the recruitment and retention of SBAE teachers. While not the only competitor, Foster et al. (2020) found the agricultural education profession is competing with the agricultural industry for recruits. Recruits are being pulled by industries in and out of the agricultural industry as 204 of the 904 college graduates in agricultural education majors chose to remain outside of the classroom upon graduation in 2019 (Foster et al., 2020). Once in the field, retention has become an issue as well with 2,361 teachers having left the classroom from 2014-2016 (Lawver et al., 2018). Of the 2,361 teachers, 20.3% left to enter agriculture production or industry (Lawver et al., 2018). Additionally, personal factors such as health, family, motivation, and work-life balance (Schultz, et al., 2019; Solomonson et al., 2018) have played a role in teachers leaving the profession. Shultz et al. (2019) found financial stress as a theme among SBAE teachers who have considered leaving the field. Teacher development such as teacher preparation programs and mentoring programs have also played a role in the recruitment and retention of SBAE teachers (Solomonson, 2018). Due to the lack of compensation, support from administration, financial stress, and proper training, SBAE teachers do not feel they have been provided with enough support or training to do the job (Schultz, et al., 2019; Solomonson, 2018). This raises the question: Can extended contracts help relieve the lack of compensation as well as some of the personal factors and teacher development issues?

Effectiveness of Extended Contracts

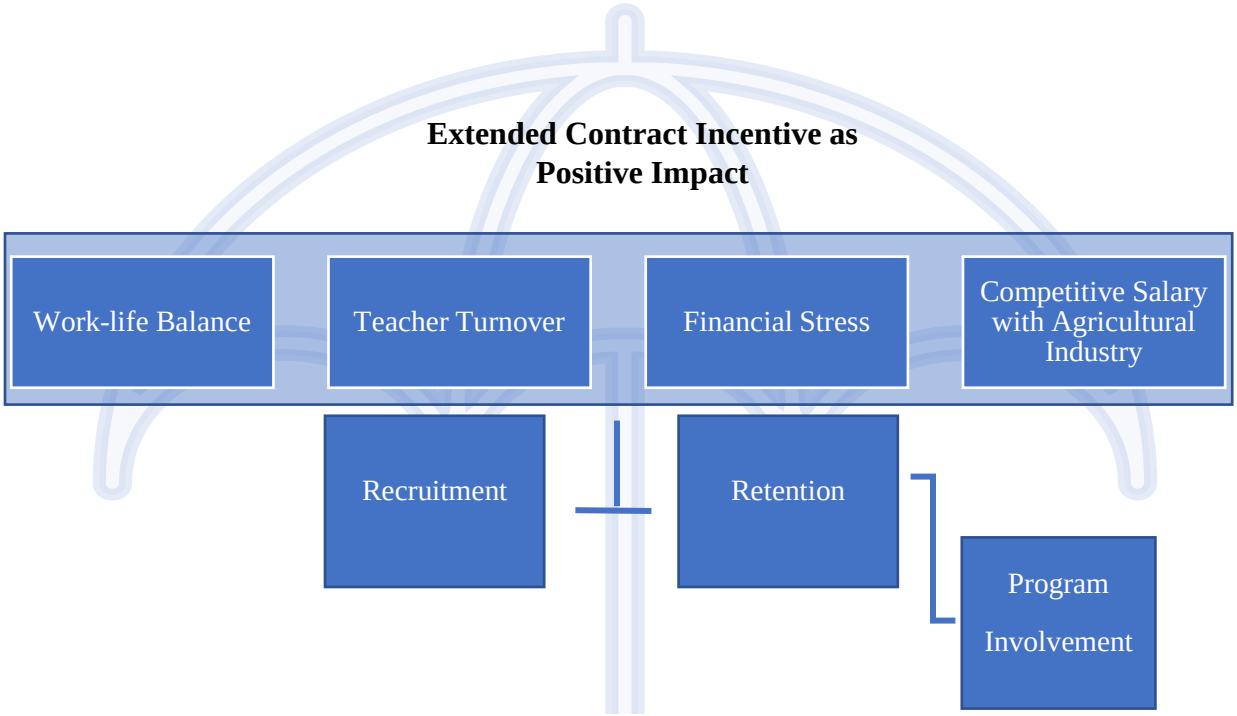
Extended contracts in agricultural education have been found to be beneficial as they provide educators more compensation, time, and recognition (Gross, 2019; Retallick, 2010). In a recent study by Gross (2019), 75% of participants rated extended contracts as the best benefit they receive when working in agricultural education. As finances arose as a theme among the participants as a large factor when considering opportunity cost among jobs, extended contracts increase compensation (Gross, 2019). Additionally, Tippens et al. (2013) found extended contracts made a positive impact on job satisfaction among SBAE teachers. The researchers found 5% of participants were likely to leave the profession due to the lack of an extended contract (Tippens et al., 2013). At the program level, SBAE teachers struggled with implementing SAE in their programs if they did not have the support of administration for extended contracts (Retallick, 2010). Without the extended contract, they simply did not have time to implement SAEs. This finding is corroborated by Dryer and Williams (1997) which found various studies agree programs with extended contracts have higher quality SAE programs with SBAE teachers are more involved in attending SAE visits and planning SAEs (Dryer & Williams, 1997). Organizations within the profession such as the National Association of Agricultural Educators, National Council for Agricultural Education, and American Association for Agricultural Education support summer contracts for SBAE teachers due to the increase of involvement and need for compensation during summer commitments such as FFA conferences, conventions, and SAE visits (National Association of Agricultural Educators [NAAE] et al., 1998).

Conceptual Framework

Due to the shortage of SBAE teachers, the profession has been examining the factors that influence recruitment and retainment of SBAE teachers including compensation and salary competition (Eck & Craig, 2019; Murray et al., 2011; Lawver et al., 2018). The salary competition between the agricultural industry and agricultural education profession (Foster et al., 2018), financial stress and the need for compensation have been identified as reasons for why teachers choose to leave the profession or never enter the profession (Schultz, et al., 2019; Solomonson et al., 2018). As extended contracts have been identified as a beneficial tool to teachers in addressing financial stress (Gross, 2019), the researchers in the present study will contribute to the literature to explore perceptions SBAE teachers have on extended contracts with a sample of SBAE teachers in Pennsylvania. To gather perceptions, we built a conceptual framework using the four major factors affecting recruitment and retention of agriculture teachers as identified in the literature (Schultz, et al; Solomonson et al., 2018): 1) competitive salary with the agricultural industry, 2) work-life balance, 3) teacher turnover, and 4) financial stress. To better understand how extended contracts are perceived, we focused on how financial stress impacts recruitment and retention in the SBAE profession. All four factors are analyzed; however, financial stress is the focus as extended contracts work to increase the compensation of SBAE teachers. Figure 1 illustrates this focus of a potential relationship between financial stress and recruitment/retention.

Figure 1

Conceptual Framework for Perceptions on Extended Contracts



As programs struggled specifically to complete the SAE portion of the three-circle model without extended contracts (Retallick, 2010), we explore teachers' perceptions on the impact extended contracts have on programs. As Dryer and William's (1997) review on SAE programs found that teachers with an extended contract had more effective SAE programs, we work to contribute to the literature further by asking participants how much time they spend on SAEs and how much time they allot to the extended contract, if present. Additionally, we examine how extra compensation may increase involvement of SAEs through the questionnaire and interview questions.

Figure 1 illustrates the four key factors affecting recruitment and retention in agricultural education. Program involvement was placed under retention as literature shows agriculture teachers in SBAE are working roughly 55-57 hours a week which in turn, impacts the retainment of teachers (Cooper & Nelson, 1981; Murray et al., 2011; Sorensen et al., 2017). Additionally, Murray et al. (2011) found agriculture teachers of both genders were working beyond the hours they were compensated. Extended contracts may not be able to provide compensation for all hours completed outside of the 180-day school year, however, they can increase compensation and recognition. As a result, this provides more funding which may serve as a way for agricultural education to compete against the agricultural industry's salary and relieve financial stress. This could potentially increase recruitment and retention in the field. In Pennsylvania, there is not a grant or plan developed for teachers to use to promote extended contracts as it is currently up to the district on how or if extended contracts are implemented. Additionally, research has not been conducted on extended contracts among Pennsylvania SBAE teachers (National Association of Agricultural Educators [NAAE], 2019). This is concerning as the

National Council for Agricultural Education (NCAE) (2015) recommends extended contracts for agriculture teachers to enable them to be actively involved in SAE programming, planning, and visits to enhance student's learning outside the classroom. Using the conceptual framework above, the researchers will contribute to literature by examining a state that does not have a state mandate or recommendation for extended contracts in hopes of identifying how extended contracts and the types of extended contracts vary and impact financial factors impacting recruitment and retention of SBAE teachers.

Purpose and Objectives

The purpose of this mixed-method study was to examine the perceptions of extended contracts among a sample of SBAE teachers in Pennsylvania. The scope of the study aligns with research priority 5 of the National AAAE Research Agenda (Roberts et al., 2016); Efficient and Effective Agricultural Education Programs under research priority question 5: "How can quality agricultural leadership, education, and communication educational programs be delivered in a cost-effective manner". The following research questions guided this study:

1. How many extended contract days do Pennsylvania SBAE teachers have?
2. What type of extended contracts do Pennsylvania SBAE teachers have, if any?
3. Are the belief perceptions on extended contracts of Pennsylvania SBAE teachers different based on demographic factors?
    a. Is there a difference between the number of teachers' years of experience and their beliefs on extended contracts?
    b. Is there a difference between genders and their beliefs on extended contracts?
    c. Is there a difference in teacher beliefs on extended contracts based on their type of program (single/multi-teacher program)?
4. Do Pennsylvania SBAE teachers perceive extended contract days having an impact on:
    a. Recruitment to the profession?
    b. Retention in the profession?

Methods and Instrument

Two sources of data were collected for the mixed-method study. To recruit participants, the Center for Professional Personnel Development provided access to the Pennsylvania SBAE teacher directory. All current Pennsylvania SBAE (n = 241) were emailed to ask for their participation in a Qualtrics questionnaire serving as a convenience sample. The original distribution asked teachers to participated in the survey which resulted in 178 emails being delivered and 63 failed. The 63 email addresses were then examined and redistributed with 5 emails still bouncing. Out of the 241 emails sent, there were 79 respondents for a response rate of 33%. Using Dillman's (2014) method, the first reminder was sent seven days after the first ask. The second reminder followed 5 days later. Once participants completed the survey, they were asked to provide their email if they would be willing to participate in a focus group session. Five participants provided contact information to participate. Out of the five participants, two were able to complete the session. As a result, the session became an interview as focus groups should comprise of 5-10 participants for non-commercial studies (Krueger & Casey , 2009).

The questionnaire was developed by the researcher. The first section of the survey identifies if participants were on an extended contract, what type of an extended contract they were on (flat rate, monthly, hourly, or other), where the funding for the extended contract came from (state, district, local, or other), and how much they were paid for the extended time. Moreover, researchers used this section of the survey to ask participants to describe how the time of their extended contract was used among the three-circle model areas of classroom instruction,

FFA, and SAE. Participants broke down the percentage of extended contract time spent in the three areas including an estimate of how many hours were devoted to each area. The second section of the questionnaire was used to ask participants Likert-type questions (Strongly agree=1 to Strongly disagree= 5) to determine how much they believed extended contracts were beneficial to themselves and their programs. Additionally, researchers asked participants to what extent they agree that extended contracts should be paid by the state/district using a five-point Likert-scale. The next section was a belief construct using a five-point Likert-scale where researchers asked teachers to rate the positive impact extended contracts have on the four major factors affecting the agricultural education: 1) competitive salary with the agricultural industry, 2) work-life balance, 3) teacher turnover, and 4) financial stress. The 4-item belief construct was summated for further analysis. In the last section, researchers surveyed participants' demographics including years of teaching experience, gender, and if they were a part of a multi-teacher program. Years of teaching experience were collected by having teachers identify as early (1-5 years), mid (6-10 years), or late (11+ years) career teachers. Due to the low response rate, early (1-5 years) and mid (6-10 years) categories were combined for analysis.

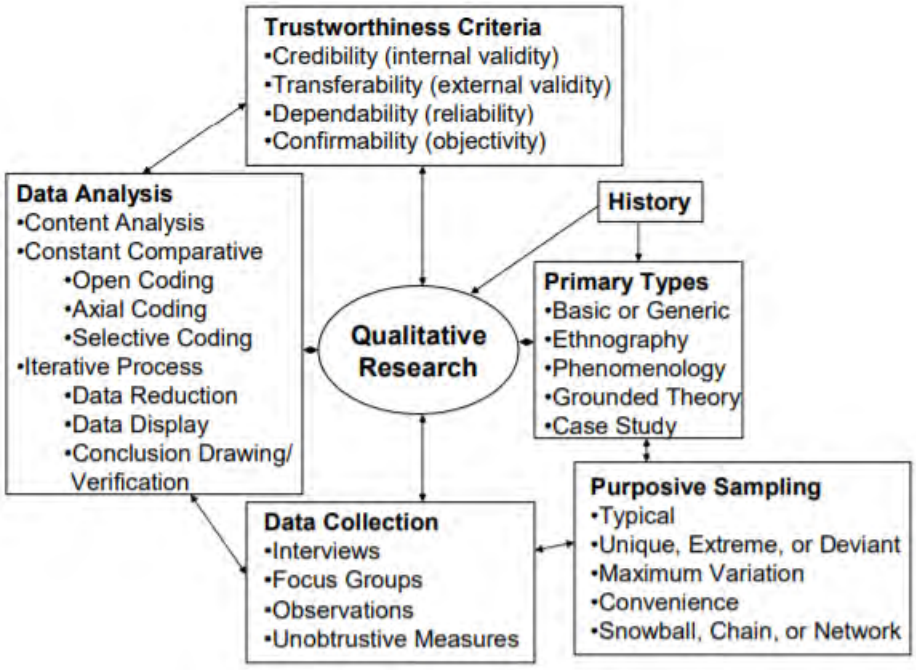
Quantitative data were analyzed in SPSS version 26. Descriptive statistics were used to report demographic data. A Cronbach's alpha was computed to determine the reliability of the researcher developed belief construct. A one-way ANOVA was conducted to determine if there is a difference between the level of experience and the perceptions of extended contracts. Post hoc independent sample t-tests identified which stage of years of experience (early or late) had different belief perceptions. Independent sample t-tests determined if there was a difference between being a part of a multi-teacher program and the perceptions on extended contracts. A chi-square test was conducted to determine if there were significant differences between gender and if the teacher was on an extended contract. To address non-response error, an independent sample t-test was ran to compare the means of early and late respondents. No significant difference was found. The second source of data were collected by conducting focus groups. At the end of the questionnaire, participants had the opportunity to opt-in for a focus group portion of the study to provide further information. Five teachers expressed interest in attending. However, only two attended the session. So instead of a focus group, an interview with the two SBAE teachers was conducted through a one-hour Zoom video call where participants were asked to discuss the effects extended contracts have had on their lives, programs, and profession. Additionally, participants were asked to work as a group to develop a state model for extended contracts while using other state examples and guiding questions. The interview portion of the study was informed by the data collected in the quantitative portion of the study. By doing a mixed-method study, we were able to dig deeper into why extended contracts were perceived as benefical as well as how extended contracts should be constructed. The interview was transcribed verbatim and assigned level one codes in an open coding process, followed by axial coding (Scott & Medaugh, 2017). The transcripts underwent thematic content analysis to discover themes among the perceived impacts extended contracts have on teachers and their programs. Monikers were used to protect the identity of the participants. A panel of experts reviewed all questionnaire items for face and content validity as well as provided feedback to the questions used for the interview.

Dooley (2007) provides a conceptual framework for qualitative research in agricultural education as illustrated in Figure 2. According to the framework, the qualitative method of conducting interviews through a convenience sample followed by an analysis of the data through axial coding is appropriate (Dooley, 2007). To determine the trustworthiness of the qualitative data, credibility, transferability, dependability, and confirmability are measured. According to Dooley (2007), credibility is achieved when the researcher can represent the different types of realities participants experience. The two participants involved in the interview experience very

different realities. One participant is a part of a multi-teacher program where each teacher is given a 30-day extended contract while the other participant is a part of a single teacher program where she must negotiate each year for extended contract days. She currently is allotted only 10 extended contracts. We acknowledge the limitation of only having two realities present in the study. Transferability in qualitative research can occur through purposeful sampling and detailed descriptions of the data so the reader can make judgement on "the applicability of the data to their context" (Dooley, 2007). We provided why the current state was selected and identified the sampling for the qualitative piece of the study as a convenience sample as it consisted of those survey participants who were willing to continue the study. Due to the nature of qualitative research having multiple realities, reliability cannot be measured as it looks at replication. With multiple realities, it would be almost impossible to do so (Dooley, 2007). Therefore, the dependability audit can be used to measure the dependability of the findings (Dooley, 2007). We kept a dependability audit by documenting methodological decisions. Lastly, confirmability is the ability of the data to be sourced back to its original form (Dooley, 2007). All data, results, and conclusions can be traced back to the original interview audio and transcription.

Figure 2

Qualitative Research Conceptual Framework for Agricultural Educators (Dooley, 2007)



Limitations

Three limitations include data saturation, researcher bias and non-response error. As we only had two willing participants, saturation defined as a quantified amount was not met. However, we interviewed all those that were willing. Because of the nature of qualitative data, researcher bias was ultimately impossible to completely remove. To address the bias, the analysis and conclusions were reviewed by both researchers to identify gaps in the argument and findings. To address non-response error, an independent sample t-test of the early and late respondents was conducted which indicated non-response bias does not exist.

Results

Demographics

Participants characterized their school setting as rural (n = 56) and suburban (n = 18) with no participants identifying urban as a school setting. There were 37 males and 37 females. When asked if they were a part of a multi-teacher program, 39 participants said yes and 35 said no. Of the 39 participants who said they were a part of a multi-teacher program, participants had two teacher programs (n = 27), three teacher programs (n = 9), and four teacher programs (n = 1). Participants' number of years of teaching experience fell into three groups: 1-5 years of teaching (n = 14), 6-10 years of teaching (n = 16), and 11+ years of teaching (n = 44).

RQ 1: How many extended contract days do Pennsylvania SBAE teachers have?

The quantitative results indicate 65.8% of participants (n = 52) are currently employed with an extended contract as shown in Table 1. Of those who currently have an extended contract, the average amount of days allotted for an extended contract was 16.5 days. A chi-square test of independence was performed to examine the relationship between gender and the presence of an extended contract. The analysis revealed a significant difference X^2 (1) = 5.11, p = 0.024. Out of the 37 women and 37 men, women were more likely to be on an extended contract than men with 81% of women and 57% of men having an extended contract.

Table 1

Pennsylvania SBAE teachers currently paid an extended contract (n = 79)

Paid or not paid an extended contract	Frequency, *n (%)*
Paid on an extended contract	52(65.8)
No extended contract	27(34.2)

RQ 2: What type of extended contracts do Pennsylvania SBAE teachers have, if any?

Of those on extended contracts, 94% of participants' extended contracts are paid through the district. Table 2 shows the type of extended contracts were flat rate (n = 15), hourly (n = 15), and other (n = 22). The three common types of extended contracts under 'other' were per diem (n = 4), per 7-hour day (11), and an FFA stipend (n = 3). When asked to report the percentage of extended contract time spent in the areas of the three-circle model, teachers reported an average of a 57/32/10 percent split for FFA, SAE, and classroom instruction, respectively. Further, when asked to report the average hours in each area, teachers reported FFA accounting for the greatest number of hours (M = 101.35) compared to SAE (M = 58.51) and classroom instruction (M = 23.44). Table 3 illustrates the percentage and hours spent in each component of the three-circle model.

Table 2

Pennsylvania SBAE extended contract types (n = 52)

Type of contract	Frequency, *n (%)*
Flat rate	15(19.0)
Hourly	15(19.0)
Other	22(27.8)

Note. There were 52 responses as only 52 participants have an extended contract. The three common types of extended contracts under 'other' were per diem (n = 4), per 7-hour day (11), and an FFA stipend (n = 3).

Table 3

Pennsylvania SBAE hours and percentage of time spent during extended contract time (n = 79)

Three-Circle Model Areas	% of Time Spent	*M* # of Hours Spent
FFA	57.37	101.35
SAE	31.86	58.51
Classroom	10.76	23.44

RQ 3: Are the perceptions of Pennsylvania SBAE teachers different based on demographic factors of years of experience, gender, and agricultural education program composition?

Next, participants were asked Likert-scale questions to indicate their perceptions of extended contracts. Results reveal 83.8% of participants agree extended contracts are beneficial to them. Additionally, 85.2% of SBAE teachers agree that extended contracts are beneficial to their program. Table 4 indicates more participants agree the district should pay for extended contracts than the state.

Table 4

Measure of Pennsylvania agriculture teachers' beliefs on extended contracts (n = 74)

Topic	Strongly agree *F*(%)	Agree *F(%)*	Neither agree nor disagree *F*(%)	Disagree *F*(%)	Strongly Disagree *F*(%)
An extended contract would be (is) beneficial for me?	51(64.6)	11(13.9)	10(12.7)	-	2(2.5)
An extended contract would be (is) beneficial for my program?	52(65.8)	11(13.9)	10(12.7)	-	1(1.3)
The state should be responsible for implementing and funding extended contracts.	11(13.9)	24(30.4)	29(36.7)	7(8.9)	3(3.8)
Districts should be responsible for implementing and funding extended contracts.	10(12.7)	33(41.8)	25(31.6)	4(5.1)	2(2.5)

Note. Strongly agree=1 to Strongly disagree= 5.

A reliability analysis was carried out on the belief construct comprising 5 items. Cronbach's alpha showed the questionnaire to reach acceptable reliability, $\alpha = 0.79$. No significant differences were reported between beliefs and gender. Further, there were no significant differences between teacher beliefs regarding extended contracts and being a part of a

multi-teacher program. There was a significant difference between beliefs and years of experience. Teachers with 1-10 years (M =1.8, SD = 0.61) reported significantly higher beliefs ($F(1,71) = 7.22$, $p = .01$, $\eta^2 = .092$) than 11+ year teachers (M = 2.25, SD = 0.76). Table 5 illustrates the mean differences between beliefs and demographic factors including gender, years of experience, and program composition.

Table 5

Mean difference between beliefs construct and demographics factors

Demographic Factors	*M*	*SD*	*N*	*p*
Gender				
Male	2.17	0.80	37	.535
Female	1.96	0.66	36	
Years of experience				
1-10 years of teaching experience	1.80	0.61	30	.049
Completed 11+ years of teaching	2.25	0.76	43	
Program Composition				
Part of a multi-teacher program	2.03	0.66	39	.391
If not a part of a multi-teacher program	2.10	0.81	34	

RQ 4: Do Pennsylvania SBAE teachers perceive extended contract days as having an impact on the recruitment/retention of teachers to the SBAE profession?

The qualitative data revealed several themes concerning the perceptions of agriculture teachers on extended contracts. Three major themes emerged including the *need for extended contracts, the lack of knowledge provided on extended contracts, and the desire for consistency across the state*.

Need for Extended Contracts

Both teachers agreed extended contracts were needed to justify the time they must put in outside of school. Betty stated:

> There's a compensation aspect of it and it also helps me kind of justify to my family like why I'm doing something extra outside of the day because it is a compensated item and it just makes it a little bit easier like when I asked my husband 'Hey, can you pick up the kids or can you do this extra thing or I have an event'. It's easier for him to feel like it's worth my time for us to adjust the family when there's an extended contract piece with it.

Lack of Knowledge

Both participants also agreed that extended contracts were needed, but there is a lack of knowledge about them among pre-service teachers, current teachers, and districts. They share how many of their colleagues in the profession, as well as their districts, are not well educated on the purpose of extended contracts, how to write one, or what they are. Due to the lack of knowledge, both teachers expressed how extended contracts could impact recruitment and retention more if teachers and districts were more aware of them before signing a contract. Betty shared:

> If there was more consistency in Pennsylvania about what an extended contract looks like I think then you'd see it being brought up more often and we'd see it factoring into that

> recruitment and retention piece a little bit more because it's so district to district right now.

Desire for Consistency Across the State

Further, both participants want to see more consistency across the state whether that is through statewide extended contracts or a document teachers can use to show districts how much their extended contract should be. Sarah stated:

> If they had like a checklist of state events and what they're worth so it was more like them telling the district like you should pay a teacher this much if they go to this event and some of it was dollar amounts and some of it was like percentage like a per diem type thing having to do with their salary.

When evaluating the impact extended contracts had on programs, SAEs were perceived to be more impacted by the presence of an extended contract. Both participants 'would do FFA anyway because that is the fun part', however, use the extended contract to stay motivated and committed to SAEs. Betty states, "It is it's the SAE visits, it's the things that maybe aren't my favorite, that's where I feel better than I'm getting compensated."

Conclusions/Recommendations/Implications

Using the conceptual framework developed from the four major factors affecting recruitment and retainment of agriculture teachers identified throughout literature, a sample of Pennsylvania SBAE teachers were surveyed to examine their perceptions on extended contracts. The results indicate over a quarter of Pennsylvania SBAE teachers are without any form of an extended contract. That begs the question: what are the rates of extended contracts in other states? Therefore, it is recommended to conduct similar studies in states without state mandated extended contracts to determine if they have an extended contract, and if so, what type they have. As districts were identified as the most common funding source for Pennsylvania (n = 49, 62%), it is recommended research be conducted at the national level of whether state or district funding sources are more successful at recruiting and retaining teachers.

When examining how beneficial extended contracts were perceived, results indicated extended contracts are perceived as beneficial by 83.8% of participants to them and 85.2% of participants to their program. Further, most participants agreed extended contracts would positively impact four major factors affecting the recruitment and retention of agriculture teachers including competitive salary with the agricultural industry, work-life balance, teacher turnover, and financial stress. The qualitative data revealed extended contracts were perceived as beneficial because they help justify the extra time teachers put into completing the three-aspects of the three-circle model to themselves, their families, and their districts according to interview participants. As the conceptual framework identifies the need for an intervention to address the factors affecting recruitment and retention in SBAE, the results provide evidence that extended contracts could serve as a potential intervention to improve the recruitment and retention within the profession as teachers may feel more satisfied and recognized for their work. Previous literature aligns to this finding as it suggests a competitive salary with the agricultural industry, work-life balance, teacher turnover, and financial stress are impacting recruitment and retention (Schultz, et al; Solomonson et al., 2018) but can be positively impacted by extended contracts (Gross, 2019). Therefore, it is recommended further research be conducted on how extended contracts impact these factors among those who have an extended contract. As we focused more on the financial stress on recruitment and retention, specifically, research needs to be conducted to identify how the composition of an extended contract affects the teacher and the program.

Additionally, literature suggests extended contracts increase involvement in FFA and SAE (Dryer & Williams, 1997; Retallick, 2010). The results presented here contribute to these findings as SBAE teachers spend more of their extended contract time on FFA (57.37%) and SAE (31.86%) than classroom instruction (10.76%). As we did not provide guidance on how to determine which hours belong to FFA and SAE, it is recommended to provide more instruction when asking SBAE to assign their time into these two buckets. Further, more research on why women (81%) are more likely to have an extended contract than men (57%) needs to be conducted. The interviews conducted by the researcher identified possible reasons why teachers may not have an extended contract such as district policies or the teacher's lack of knowledge of an extended contract, however, it does not identify why there is a difference between gender and having an extended contract. The qualitative data also identified the need for statewide consistency when it comes to extended contracts, potentially filling the knowledge gap on extended contracts for preservice teachers and district leaders as the interview participants identified the lack of information provided to new teachers and districts about extended contracts. Participants also shared a statewide extended contract could help increase recruitment as it could potentially make the salary more competitive to the agricultural industry. Other states (i.e., North Carolina) provide statewide extended contract options (North Carolina FFA Association, 2020). Further investigation into the efficacy of these programs would shine light as to how an approach for a statewide extended contract in Pennsylvania could be implemented.

Lastly, SBAE teachers with 1-10 years (M =1.8, SD =0.61) had significantly higher beliefs (p =.01) than 11+ year teachers (M =2.25, SD =0.76). Therefore, SBAE teachers with 1-10 years of experience perceived extended contracts to be more beneficial for themselves and their programs. We did not explore why the difference is there, but the interview participants did indicate extended contracts were needed to justify the work to their families as new parents and teachers. However, more research on why more SBAE teachers with 1-10 years of perceive extended contracts as more beneficial than teachers with 11+ years of experience is recommended.

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