

# The Importance of FFA and SAE Activities: A Comparison of Texas Principals' and Teachers' Perceptions

Will Doss<sup>1</sup> and John Rayfield<sup>2</sup>

## Abstract

*The relationship between principals and school-based agricultural education (SBAE) teachers is crucial for SBAE program success. According to educational leadership theory, principal perceptions of a program can lead to support and student achievement. There is a gap in the literature concerning principal perceptions of specific FFA and SAE activities within the last 30 years. Findings from this survey design study showed both principals and SBAE teachers perceived FFA and SAE activities were important, and no significant difference was found between principals and SBAE teachers on the perceived importance of FFA or SAE activities. It was recommended SBAE teachers continue to educate administrators about FFA and SAE activities and maintain an effective line of communication to maintain the current positive perceptions held about SBAE program components. Additional research should be conducted to determine how principal perceptions of SBAE programs lead to support as well as determine what SBAE teachers view as adequate administrative program support.*

**Keywords:** principal perceptions; FFA; SAE

## Introduction/Review of Literature

The executive director of the Agriculture Teachers Association of Texas recently called attention to the need for school-based agricultural education (SBAE) teachers to communicate with school administrators to gain agricultural education program support (Pieniazek, 2019). The relationship between school administrators and SBAE teachers has historically been considered vital to agricultural education program success because administrators ultimately make decisions impacting the program including whether or not to allow funding, travel, and student absences to name a few (Shoemaker, 1972; Talbert et al., 2007). A challenge SBAE teachers experience with administrator relationships is the continuous turnover of administrators in schools (Rangel, 2018). Given this information, the need for this study arose. An investigation comparing current teacher and principal attitudes toward FFA and supervised agricultural experience (SAE) activities could potentially identify areas for relationship improvement to maximize program support.

Agricultural education is often described by the three-component model with classroom and laboratory instruction, FFA participation, and SAE participation as the three components (National FFA Organization, 2020). While principals' perceptions of each component are important to understand, this study focuses on perceptions of FFA and SAE because it is unique to SBAE teachers within the school. To determine FFA and SAE activities that would require administrative support and examine this topic from a historical standpoint, a review of literature was conducted.

---

<sup>1</sup> Will Doss is an Assistant Professor in Agricultural Education and Mechanics in the College of Agricultural Sciences and Natural Resources at Texas A&M University – Commerce, P.O. 3011, Commerce, TX 75429-3011, [William.Doss@tamuc.edu](mailto:William.Doss@tamuc.edu)

<sup>2</sup> John Rayfield is a Professor of Agricultural Education in the Department of Agricultural Education and Communications at Texas Tech University, Box 42131, Lubbock, TX 79409-2131, [John.Rayfield@ttu.edu](mailto:John.Rayfield@ttu.edu).

In Texas agricultural education programs, schools have the opportunity to participate in local, district, area, state, and national conventions and meetings (National FFA Organization, 2020; Texas FFA Association, 2020). These events often require travel and funding but give students opportunities to serve as voting delegates, compete for higher offices, engage in the leadership process, be recognized for success such as the National Chapter Award, and sometimes participate in various Leadership Development Events (LDE), Career Development Events (CDE), Speaking Development Events (SDE), and agriscience fair competitions (National FFA Organization, 2020). According to the National FFA Organization (2020), the National Association of Secondary School Principals has even approved attending the national convention and expo because of the opportunity to experience education-filled programs.

In an early study comparing Mississippi administrator and teacher perceptions of agricultural education programs, SBAE teachers viewed district and state FFA activities at a higher level of importance than administrators (Shoemake, 1972). Over thirty years later, Frazee et al. (2004) determined principals in Texas viewed participation in FFA events as important. While there is sparse literature available on principal perceptions of specific FFA activities, a few studies explored principal perceptions of select local FFA activities. In a study comparing SBAE teachers and principals in Idaho, Rush and Foster (1984) found principals viewed conducting a banquet and public relations activities as less important than teachers. However, these findings are over 35 years old. Do they still hold today with higher administrator turnover rates? Several modern studies have determined principals have a generally positive view toward the overall agricultural education program, however few have examined specific FFA activities within programs (Kalme & Dyer, 2000; Pavelock, 2000; Smith & Myers, 2012).

Concerning SAEs, one of the major benefits for students participating is the experiential learning opportunities (Baker et al., 2012). In a study of North Carolina principals, it was found principals perceived SAEs to be important for students in their schools (Rayfield & Wilson, 2009). However, this study did not examine how principals perceived different SAE activities. One SAE activity frequently conducted by teachers is attending livestock shows with their students to exhibit their SAEs (Huston, 2020). Permission is often required from school principals for the teacher to miss school to attend these shows. Agricultural mechanics shows are also becoming more popular in Texas to give students the opportunity to exhibit agricultural mechanics SAEs, requiring even more travel time (Doss et al., 2019). Another requirement SBAE teachers face related to SAEs is teaching record keeping skills (Talbert et al., 2007). This often comes with the need to purchase a record keeping system, again requiring administrator approval.

The National FFA Organization also has several different award programs used to recognize student SAE achievement. Students have the opportunity to earn FFA scholarships, earn FFA degrees, compete for FFA Star awards, and compete for FFA SAE proficiency awards (National FFA Organization, 2020). These activities all require extensive supervision from the SBAE teacher and often require principal signatures certifying the experiences.

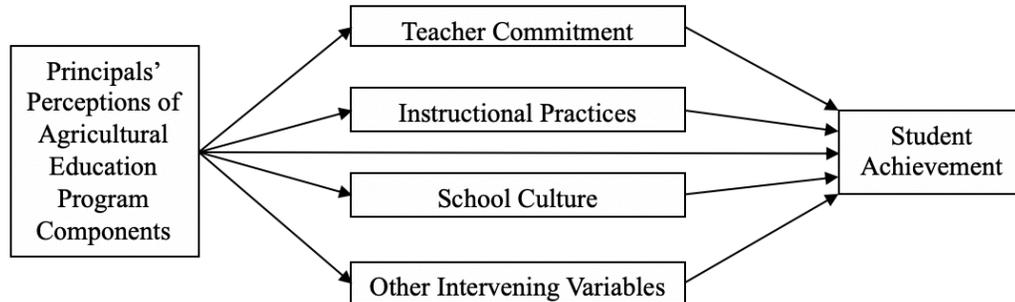
### **Theoretical Framework**

According to Ross and Cozzens (2016), principals play an important role in setting the school climate. Today, poor relationships with administrators continue to be a reason SBAE teachers leave the field (Boone, 2003; Boone & Boone, 2009; Clark et al., 2014; Walker et al., 2004). A good relationship with administrators can also be a reason some teachers stay in the profession for a long career (Clark et al., 2014). The importance of principals' perceptions of agricultural education programs can be realized by examining Pitner's (1988) educational leadership theory on the reciprocal effects between school leadership and student achievement. Pitner's theory states an administrator can indirectly affect student achievement through actions. The results of those actions will then influence future decisions. Leithwood and Montgomery (1982) also suggested attitudes of principals can indirectly influence

student achievement by influencing variables such as school culture, instructional practices used in the classroom, and teacher commitment. These variables can be thought of in the context of Pitner's (1988) educational leadership theory and are shown in Figure 1.

**Figure 1**

*Direct and Indirect Secondary School Principal Perception Effects on Student Achievement*



This study applies principals' perceptions of FFA and SAE as the agricultural education program components of this model. Perceptions held by principals of FFA and SAE activities would, in theory, partially have a direct influence on student achievement and would partially have a direct influence on teacher commitment. Teacher commitment would then have an influence on student achievement. Understanding principal perceptions of FFA and SAE activities can shed light on the possible impact principals can have on teacher commitment and student achievement. Findings from this study will help fill the gap in modern literature on this topic and serve as a point of comparison to early studies. Findings from this study can also help teacher preparation programs in the state better prepare teachers to work with their principals and maintain a supportive relationship.

### Purpose and Objectives

The purpose of this study was to compare principals' and SBAE teachers' perceptions of the importance of FFA and SAE activities within agricultural education programs in Texas secondary schools. The objectives used to guide this study were:

1. Examine demographics of participating principals and SBAE teachers.
2. Determine FFA activities currently in practice at secondary schools as reported by principals and SBAE teachers.
3. Determine SAE activities currently in practice at secondary schools as reported by principals and SBAE teachers.
4. Determine principals' and SBAE teachers' perceptions of the importance of FFA activities.
5. Determine principals' and SBAE teachers' perceptions of the importance of SAE activities.
6. Compare principals' and teachers' perceptions of the importance of agricultural education program FFA and SAE activities.

$H_{0a}$ : There is no statistically significant difference in principals' and teachers' perceptions of the importance of agricultural education program FFA activities.

$H_{0b}$ : There is no statistically significant difference in principals' and teachers' perceptions of the importance of agricultural education program SAE activities.

## Methods

To accomplish the objectives of this study, a cross-sectional, descriptive, survey research design (Fraenkel et al., 2015) was used. The instrument used for data collection was designed by the researchers. The target population was high school principals and secondary SBAE teachers in Texas who work at a school with an FFA chapter. According to the National FFA Organization (2020), there were 1,055 FFA chapters in the state. A sample size of ( $n = 285$ ) schools with FFA chapters was determined and randomly selected from a list of FFA chapters in the state (Krejcie & Morgan, 1970). One principal and one SBAE teacher was contacted from each school for a total of two groups: ( $n = 285$ ) principals and ( $n = 285$ ) SBAE teachers.

In the instrument, three subscales were used to assess overall perceptions held toward FFA activities. Items for each subscale were determined from the review of literature and previous studies. The FFA Meetings and Conventions subscale had the following items: participation in local FFA meetings, district FFA meetings/conventions, area FFA meetings/conventions, state FFA meetings/conventions, and national FFA meetings/conventions. The second subscale, Competitive FFA Events, had the following items: CDE participation, LDE participation, SDE participation, agriscience fair participation, competing for officer positions above the local level, and competing in the National Chapter Award competition. The final FFA subscale of FFA Chapter Promotion of Success had the following items: having an FFA banquet, promoting FFA events/success on social media, and promoting FFA member SAEs on social media.

To assess overall perceptions held toward SAE activities, three additional subscales were used. All items for each subscale were determined from the review of literature and from items used in previous studies. The SAE Exhibition subscale had the following items: attending livestock shows and attending agricultural mechanics shows. The SAE Education subscale had the following items: teaching record keeping skills on SAEs and experiential learning that occurs with SAEs. The final SAE subscale for SAE Awards had the following items: earning FFA scholarships for SAEs, earning FFA degrees for SAEs, competing for FFA star awards for SAEs, and competing for FFA SAE proficiency awards.

Instrument content and face validity were established by a panel of five experts at Texas Tech University in agricultural teacher education and survey instrument development. A pilot test was conducted with a mixture of principals ( $n = 7$ ) and SBAE teachers ( $n = 25$ ) not included in this study for a total of 32 pilot test participants. As suggested by Warmbrod (2014), a Cronbach's alpha was calculated for the overall scale and each subscale. The overall summated scale for perceived attitude toward FFA activities had a Cronbach's alpha of ( $\alpha = 0.86$ ). Each FFA subscale had the following alpha levels: FFA Meetings and Conventions ( $\alpha = 0.80$ ), Competitive FFA Events ( $\alpha = 0.74$ ), and FFA Chapter Promotion of Success ( $\alpha = 0.71$ ). The overall summated scale for perceived attitude toward SAE activities had a Cronbach's alpha of ( $\alpha = 0.81$ ). Each SAE subscale had the following alpha levels: SAE Exhibition ( $\alpha = 0.77$ ), SAE Education ( $\alpha = 0.70$ ), and SAE Awards ( $\alpha = 0.73$ ). According to Field (2018), each of the reported alpha levels for overall scales and subscales are acceptable for exploratory studies.

Upon IRB approval from Texas Tech University, the instrument was emailed to participants through Qualtrics. Consent information was provided in the initial email and consent was obtained if the participant chose to respond to the questionnaire. Responses were solicited using Dillman's tailored design method (Dillman et al., 2014). Five total contacts were made through email beginning with an initial invitation to participate, followed by four reminder emails, each one week apart. Of the 285 principals contacted 27% ( $n = 76$ ) responded. Of the 285 SBAE teachers contacted 30% ( $n = 86$ ) responded. To control for nonresponse error, a comparison of early to late respondents was conducted because the response rates were below 85% (Lindner et al., 2001). Early respondents were defined as those responding during the first three rounds of contact, while late respondents were those who responded during the last two rounds of contact. No statistically significant differences were found

between early and late respondents with either the group of principals or the group of teachers. However, due to low response rates and sampling from only one state, caution should be exercised when attempting to make generalizations. Descriptive statistics such as means, standard deviations, frequencies, and percentages were calculated for demographics and scale items. Each item for subscales and the overall scale were summated and averaged. An ANOVA was used to compare overall principal and SBAE teacher perceptions of FFA and SAE activities. Significance was established *a priori* at  $p = .05$ . All data were analyzed in IBM SPSS version 25.0.

### Findings

Demographic findings of this study included years of experience in the participants' current job position. Principals averaged 5.31 ( $SD = 6.31$ ) years of experience, while SBAE teachers averaged 10.37 ( $SD = 10.15$ ) years. To gain an idea of agricultural education experience of both principals and teachers, they were asked if they were ever enrolled in a middle or high school agricultural education course. Principals had taken agricultural education courses ( $f = 35, 46.05\%$ ) less frequently than agricultural education teachers ( $f = 78, 90.70\%$ ). School district location and SBAE program size information was also collected from participants. These findings are summarized in Table 1.

**Table 1**

*Reported Participant Agricultural Education Department Sizes and School Locations (N = 162)*

	Principals (n=76)		Teachers (n=86)	
	<i>f</i>	%	<i>f</i>	%
Agriculture Department Size				
1 Teacher	24	31.58	27	31.40
2 Teachers	28	36.84	31	36.05
3 Teachers	16	21.05	19	22.09
4 Teachers	6	7.89	5	5.81
5 Teachers	1	1.32	2	2.33
6 Teachers	1	1.32	1	1.16
7 Teachers	0	0.00	1	1.16
School Location				
Rural (Pop. < 2,500)	50	65.79	54	62.79
Suburban (Pop. 2,500-50,000)	23	30.26	23	26.74
Urban (Pop. > 50,000)	3	3.95	9	10.47

The second objective of this study sought to determine FFA activities currently in practice at secondary schools as reported by principals and SBAE teachers. Participants were given a list of FFA activities and were asked to check yes or no if the activity is currently in practice at their school. Attending district FFA meetings/conventions was the activity most frequently reported by principals ( $f = 75, 98.68\%$ ) while CDE participation was most frequently reported by SBAE teachers ( $f = 86, 100.00\%$ ). Agriscience fair participation was reported the least by both principals ( $f = 31, 40.79\%$ ) and SBAE teachers ( $f = 20, 23.36\%$ ). Refer to Table 2 for a complete breakdown of FFA activities currently in practice as reported by principals and SBAE teachers.

**Table 2***FFA Activities Currently in Practice Reported by Principals and SBAE Teachers*

Activity	Principals (N = 76)		Teachers (N = 86)	
	f	%	f	%
District FFA Meetings/Conventions	75	98.68	85	98.84
Local FFA Meetings	74	97.37	83	96.51
Area FFA Meetings/Conventions	71	93.42	85	98.84
CDE Participation	70	92.11	86	100.00
State FFA Meetings/Conventions	69	90.79	85	98.84
LDE Participation	69	90.79	84	97.67
Promoting FFA Events/Success on Social Media	66	86.84	72	83.72
SDE Participation	65	85.53	70	81.40
Having an FFA Banquet	65	85.53	82	95.35
Competing for Officer Positions Above Local Level	63	82.89	64	74.42
Competing in National Chapter Award Competition	54	71.05	41	47.67
Promoting FFA Member SAEs on Social Media	53	69.74	65	75.58
National FFA Meetings/Conventions	38	50.00	24	27.91
Agriscience Fair Participation	31	40.79	20	23.26

The third objective of this study was to determine SAE activities currently in practice at secondary schools as reported by principals and SBAE teachers. Again, participants were asked to indicate if SAE activities were in place at their schools by checking yes or no for the provided list of activities. Attending livestock shows was the SAE activity most frequently reported by principals ( $f = 75, 98.68\%$ ) while earning FFA degrees for SAEs was most frequently reported by SBAE teachers ( $f = 85, 98.84\%$ ). Table 3 provides a complete list of frequencies for reported SAE activities by principals and SBAE teachers.

**Table 3***SAE Activities Currently in Practice Reported by Principals and SBAE Teachers*

Activity	Principals (N = 76)		Teachers (N = 86)	
	f	%	f	%
Attending Livestock Shows	75	98.68	84	97.67
Earning FFA Scholarships for SAEs	68	89.47	69	80.23
Teaching Record Keeping Skills on SAEs	66	86.84	82	95.35
Earning FFA Degrees for SAEs	64	84.21	85	98.84
Experiential Learning that Occurs with SAEs	62	81.58	65	75.58
Attending Agricultural Mechanics Shows	57	75.00	66	76.74
Competing for FFA Star Awards for SAEs	57	75.00	43	50.00
Competing for FFA SAE Proficiency Awards	55	72.37	47	54.65

The fourth objective was to determine principals' and SBAE teachers' perceptions of the importance of FFA activities. Overall perceptions toward participation in FFA activities were measured through the three previously described subscales. Perceptions were assessed on a Likert scale ranging from 1 = *Unimportant* to 5 = *Important*. For interpretation real limits of the subscales were 1.00 to 1.49 = *Unimportant*, 1.50 to 2.49 = *Somewhat Unimportant*, 2.50 to 3.49 = *No Opinion*, 3.50 to 4.49 = *Somewhat Important*, and 4.50 to 5.00 = *Important*. Table 4 presents individual items for each subscale and response percentages for each corresponding item reported by principals. Overall a majority of

principals indicated a five on the scale for all items except attending national FFA meetings/conventions.

**Table 4**

*Item Response Percentages for Perceived Importance of FFA Activities by Principals (N = 76)*

Item	1	2	3	4	5
FFA Meetings and Conventions Subscale					
Local FFA Meetings	0.00	0.00	1.30	9.20	89.50
District FFA Meetings/Conventions	0.00	0.00	2.60	13.20	84.20
Area FFA Meetings/Conventions	0.00	2.60	2.60	13.20	81.60
State FFA Meetings/Conventions	0.00	3.90	2.60	17.10	76.30
National FFA Meetings/Conventions	1.30	13.20	3.90	32.90	48.70
Competitive FFA Events Subscale					
CDE Participation	0.00	1.30	0.00	10.50	88.20
LDE Participation	0.00	1.30	1.30	7.90	89.50
SDE Participation	0.00	2.60	1.30	7.90	88.20
Agriscience Fair Participation	1.30	3.90	13.20	25.00	56.60
Competing for Officer Positions Above Local Level	0.00	2.60	3.90	11.80	81.60
Competing in National Chapter Award Competition	1.20	2.60	3.90	17.10	75.00
FFA Chapter Promotion of Success Subscale					
Having an FFA Banquet	0.00	2.60	1.30	11.80	84.20
Promoting FFA Events/Success on Social Media	0.00	3.90	2.60	10.50	82.90
Promoting FFA Member SAEs on Social Media	1.30	6.60	3.90	10.50	77.60

*Note.* 1 = Unimportant, 2 = Somewhat Unimportant, 3 = No Opinion, 4 = Somewhat Important, and 5 = Important.

For SBAE teachers, individual items for each subscale and response percentages for each corresponding item reported is presented in Table 5. Overall a majority of SBAE teachers indicated a five for all items with the exceptions of attending national FFA meetings/conventions and agriscience fair participation.

**Table 5***Item Response Percentages for Perceived Importance of FFA Activities by Teachers (N = 86)*

Item	1	2	3	4	5
FFA Meetings and Conventions Sub Scale					
Local FFA Meetings	0.00	0.00	0.00	5.80	94.20
District FFA Meetings/Conventions	0.00	0.00	0.00	10.50	89.50
Area FFA Meetings/Conventions	0.00	0.00	0.00	10.50	89.50
State FFA Meetings/Conventions	0.00	1.20	0.00	9.30	89.50
National FFA Meetings/Conventions	1.20	9.30	2.30	45.30	41.90
Competitive FFA Events Sub Scale					
CDE Participation	0.00	0.00	0.00	7.00	93.00
LDE Participation	0.00	0.00	0.00	8.10	91.90
SDE Participation	0.00	0.00	0.00	22.40	77.60
Agriscience Fair Participation	3.50	4.70	4.70	39.50	47.70
Competing for Officer Positions Above Local Level	0.00	1.20	0.00	22.10	76.70
Competing in National Chapter Award Competition	1.20	7.00	1.20	34.90	55.80
FFA Chapter Promotion of Success Sub Scale					
Having an FFA Banquet	1.20	1.20	0.00	9.30	88.40
Promoting FFA Events/Success on Social Media	3.50	2.30	0.00	20.90	73.30
Promoting FFA Member SAEs on Social Media	3.50	8.10	0.00	20.90	67.40

Note. 1 = Unimportant, 2 = Somewhat Unimportant, 3 = No Opinion, 4 = Somewhat Important, and 5 = Important.

When comparing overall perceptions of FFA activities, both principals and SBAE teachers viewed participation in FFA activities as important. All subscales also resulted in principals and SBAE teachers viewing FFA activity participation as important. Principals viewed competitive FFA events and FFA chapter promotion of success as slightly more important than SBAE teachers. Attending FFA meetings and conventions was viewed as slightly more important by SBAE teachers than principals. Table 6 presents a complete comparison of summated subscales and overall perceptions of FFA activities held by principals and SBAE teachers.

**Table 6***Principal and Teacher Comparison of Average Importance of FFA Activities by Subscale*

Scale	Principals (N = 76)				Teachers (N = 86)			
	M	SD	Min	Max	M	SD	Min	Max
FFA Meetings & Conventions	4.65	0.53	2.80	5.00	4.74	0.35	3.20	5.00
Competitive FFA Events	4.70	0.54	2.00	5.00	4.65	0.37	3.50	5.00
FFA Chapter Promotion of Success	4.69	0.63	1.67	5.00	4.60	0.75	1.33	5.00
Overall Perception of FFA Activities	4.68	0.49	2.50	5.00	4.68	0.34	3.43	5.00

Note. 1 = Unimportant, 2 = Somewhat Unimportant, 3 = No Opinion, 4 = Somewhat Important, and 5 = Important.

The fifth objective of this study was to determine principals' and SBAE teachers' perceptions of the importance of SAE activities. Again, perceptions toward participation in SAE activities were measured through the three previously described subscales. Perceptions were assessed on a Likert scale ranging from 1 = Unimportant to 5 = Important. Real limits for interpretation of the subscales were 1.00 to 1.49 = Unimportant, 1.50 to 2.49 = Somewhat Unimportant, 2.50 to 3.49 = No Opinion, 3.50 to 4.49 = Somewhat Important, and 4.50 to 5.00 = Important. A majority of all principals

surveyed indicated each SAE activity was important. Table 7 summarizes the frequencies each level of importance selected by principals for each SAE activity.

**Table 7**

*Item Response Percentages for Perceived Importance of SAE Activities by Principals (N = 76)*

Item	1	2	3	4	5
SAE Exhibition Sub Scale					
Attending Livestock Shows	0.00	2.60	0.00	15.80	81.60
Attending Agricultural Mechanics Shows	0.00	2.60	3.90	23.70	69.70
SAE Education Sub Scale					
Teaching Record Keeping Skills on SAEs	0.00	1.30	0.00	15.80	82.90
Experiential Learning that Occurs with SAEs	0.00	2.70	2.70	13.30	81.30
SAE Awards Sub Scale					
Earning FFA Scholarships for SAEs	0.00	2.60	0.00	2.60	94.70
Earning FFA Degrees for SAEs	1.30	1.30	1.30	10.50	85.50
Competing for FFA Star Awards for SAEs	1.30	3.90	2.60	10.50	81.60
Competing for FFA SAE Proficiency Awards	1.30	3.90	1.30	13.20	80.30

Note. 1 = Unimportant, 2 = Somewhat Unimportant, 3 = No Opinion, 4 = Somewhat Important, and 5 = Important.

The majority of SBAE teachers also selected important for each SAE activity. Table 8 provides a complete breakdown of perceived level of importance selected by SBAE teachers for each of the SAE activities.

**Table 8**

*Item Response Percentages for Perceived Importance of SAE Activities by Teachers (N = 86)*

Item	1	2	3	4	5
SAE Exhibition Sub Scale					
Attending Livestock Shows	0.00	1.20	7.00	25.60	66.30
Attending Agricultural Mechanics Shows	0.00	5.80	1.20	26.70	66.30
SAE Education Sub Scale					
Teaching Record Keeping Skills on SAEs	0.00	2.30	0.00	17.40	80.20
Experiential Learning that Occurs with SAEs	0.00	2.30	1.20	18.60	77.90
SAE Awards Sub Scale					
Earning FFA Scholarships for SAEs	0.00	0.00	0.00	3.50	96.50
Earning FFA Degrees for SAEs	0.00	1.20	0.00	5.80	93.00
Competing for FFA Star Awards for SAEs	0.00	2.30	1.20	29.10	67.40
Competing for FFA SAE Proficiency Awards	1.20	2.30	1.20	26.70	68.60

Note. 1 = Unimportant, 2 = Somewhat Unimportant, 3 = No Opinion, 4 = Somewhat Important, and 5 = Important.

Principals and teachers surveyed both perceived SAE activities to be important overall. Each of the subscales also resulted in SAEs being perceived to be important by both principals and SBAE teachers. Principals viewed SAE exhibition as slightly more important than SBAE teachers. Both principals and SBAE teachers had a subscale mean score of 4.74 on the perceived importance of SAE education. SAE awards were perceived as slightly less important by principals as by SBAE teachers. Table 9 summarized results for each summated scale and subscale for both principals and teachers.

**Table 9***Principal and Teacher Comparison of Average Importance of SAE Activities by Subscale*

Scale	Principals (N = 76)				Teachers (N = 86)			
	M	SD	Min	Max	M	SD	Min	Max
SAE Exhibition	4.68	0.51	3.00	5.00	4.51	0.77	2.00	5.00
SAE Education	4.74	0.52	2.50	5.00	4.74	0.54	2.00	5.00
SAE Awards	4.75	0.64	1.75	5.00	4.77	0.39	2.75	5.00
Overall Perception of SAE Activities	4.73	0.46	3.00	5.00	4.70	0.40	2.88	5.00

Note. 1 = Unimportant, 2 = Somewhat Unimportant, 3 = No Opinion, 4 = Somewhat Important, and 5 = Important.

The final objective of this study was to compare principals' and teachers' perceptions of the importance of agricultural education program FFA and SAE activities. To meet this objective an ANOVA was conducted to determine if there was a significant difference between principals and teachers on their overall level of perceived importance of FFA and SAE activities. The alpha level was set *a priori* at 0.05. For overall perceived importance of FFA activities, the omnibus  $F_{1, 160} = .01$  was not significant ( $p = .97$ ). The null hypothesis was accepted, there is no significant difference between principals and SBAE teachers in this study on overall perceived importance of FFA activities. For overall perceived importance of SAE activities, the omnibus  $F_{1, 160} = .05$  was not significant ( $p = .26$ ). The null hypothesis was accepted, there is no significant difference between principals and SBAE teachers in this study on overall perceived importance of SAE activities. The complete ANOVA summary is presented in Table 10.

**Table 10***One-Way ANOVA Comparing Overall Perceived Importance of Program Activities (N = 162)*

Activity Type	Principals		Teachers		F(1, 160)	p	$\eta^2$
	M	SD	M	SD			
FFA Activities	4.68	0.49	4.68	0.34	.01	.97	.00
SAE Activities	4.73	0.46	4.70	0.40	.05	.26	.00

### Conclusions/Implications/Recommendations

When examining objective one, it can be concluded the average amount of time principals reported working in their current job position is about half of the time compared to SBAE teachers. Principals may be familiar with SBAE programs from their previous location or possibly teaching position. However, SBAE teachers will need to educate new administrators about the SBAE program in their particular school. If the low amount of experience is a symptom of high administrator turnover as highlighted by Rangel (2018), relationships with SBAE teachers and their principals may need to be reestablished to ensure continued program support. Less than half of all principals participating in this study had taken an agriculture course when they were in middle and high school. This could contribute to principals not knowing what SBAE teachers do in relation to FFA and SAE activities as was found by Rush and Foster (1984) and Martin et al. (1986), affecting their perceptions of these activities, however data collection in this realm was beyond the scope of this study. Principals and SBAE teachers participating in this study came from a wide range of school locations as well as from schools with varying SBAE program size.

Concerning FFA activities reported by principals and SBAE teachers that take place in their schools, similar frequencies were reported for most activities. However, principals reported the SBAE programs in their school were competing in the FFA National Chapter Award program, attending the

national FFA convention, and participating in agriscience fair more often than SBAE teachers indicated. Does this mean principals think this activity is happening when it actually is not? A limitation of this study was paired SBAE teacher and principal responses were not achieved, so it is difficult to definitively answer this question. Activities related to SAEs were reported with similar frequency by principals and SBAE teachers. Competing for FFA Star and proficiency awards had a smaller percentage of SBAE teachers indicate participation in the activities compared to principals. To more accurately determine if principals think these activities are taking place when they are not, future research should attempt to gain paired SBAE teacher and principal responses for comparison.

When comparing principals' and SBAE teachers' perceptions of the importance of participating in FFA and SAE activities, no difference was found with the overall scores. This could be an indication principals understand the importance of FFA and SAE activities and are in agreement with SBAE teachers on their importance. When applied to Pitner's (1988) educational leadership theory on reciprocal effects, this should positively influence teacher commitment and student achievement. If there is in fact a need to gain support for participation in FFA or SAE activities from principals as suggested by Pieniazek (2019), it likely is not due to principals believing these activities are unimportant.

When examining the subscale scores, principals did not view attending FFA meetings and conventions as important as SBAE teachers, similar to previous findings (Shoemaker, 1972). While the scores were close, it may indicate there is a slight need to communicate with administrators to improve their view of these activities. Principals viewed competitive FFA events and FFA chapter promotion of success as slightly more important than SBAE teachers. SBAE teachers may need to determine why this is to more closely align with their principals' expectations. The SAE subscale score showing the greatest difference between principal and SBAE teacher perceptions was attending livestock shows. Principals viewed this as slightly more important than SBAE teachers. Why did the principals in this study view this activity more importantly than SBAE teachers? Does this positive perception of attending livestock shows translate into program support to attend the shows? These questions warrant further investigation.

One of the implications from this study is overall, principals and teachers do not perceive the importance of FFA and SAE activities differently, indicating an improvement from principals viewing these activities as less important compared to SBAE teachers in early research (Shoemaker, 1972). The data from this study confirms findings from more modern research where principals have an overall positive perception toward FFA and SAE activities (Kalme & Dyer, 2000; Pavelock, 2000; Smith & Myers, 2012). On the other hand, several studies found poor relationships with administrators is a reason SBAE teachers leave the field (Boone, 2003; Boone & Boone, 2009; Clark et al., 2014; Walker et al., 2004). Based on the findings from those participating in this study, differences in perceived importance of FFA and SAE activities is likely not causing poor relationships. It appears the principals participating in this study believe FFA and SAE activities are important, so there must be some other reason why some would not be supportive of the agricultural education program.

Recommendations for practice include continuing communication between SBAE teachers and principals. When personnel change, this is an important relationship to maintain. SBAE teachers should invite their principals to attend FFA activities when possible so they can experience the benefits firsthand and continue to support local participation. SBAE teacher preparation programs should also teach preservice teachers how to effectively communicate with their future administrators and increase positive perceptions of the SBAE program.

Further research should be conducted to determine what leads principals to support or fail to support a program and how SBAE teachers can use this information to gain or maintain support for FFA and SAE activities. Defining what SBAE teachers consider to be adequate support from administrators could also be helpful information for administrators to meet the expectations of their

teachers. Due to the low response rate, this study should be replicated nationally and with other agricultural education activities to see if positive perceptions are also found and give the study more statistical power to detect perception differences. Mixed methods research should also be conducted to analyze quantitative and qualitative responses from teachers and principals. Since principals have the potential to affect student achievement in agricultural education programs and influence a teacher's decision to remain in their job position, principal perceptions of SBAE programs should be routinely monitored. Agricultural education is too important to overlook the simple issue of administration support.

### References

- Baker, M. A., Robinson, J. S., & Kolb, D. A. (2012). Aligning Kolb's experiential learning theory with comprehensive agricultural education model. *Journal of Agricultural Education*, 53(4), 1-16. <https://doi.org/10.5032/jae.2012.04001>
- Boone, H. N. (2003). Problems of agricultural education teachers: Beginning and current. In J. Cano & L. E. Miller (Eds.), *Proceedings of the 30<sup>th</sup> National Agricultural Education Research Conference* (pp. 333-347). <http://aaaeonline.org/Resources/Documents/National/ResearchProceedings,%20National2003.pdf>
- Boone, H. N., & Boone, D. A. (2009). An assessment of problems faced by high school agricultural education teachers. *Journal of Agricultural Education*, 50(1), 21-32. <https://doi.org/10.5032/jae.2009.01021>
- Clark, M. S., Kelsey, K. D., & Brown, N. R. (2014). The thornless rose: A phenomenological look at decisions career teachers make to remain in the profession. *Journal of Agricultural Education*, 55(3), 43-56. <https://doi.org/10.5032/jae.2014.03043>
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method*. (4<sup>th</sup> ed.). John Wiley & Sons.
- Doss, W., Rayfield, J., Murphy, T., & Frost, K. J. (2019). Examining agricultural mechanics projects and their use as supervised agricultural experiences. *Journal of Agricultural Education*, 60(3), 62-79. <https://doi.org/10.5032/jae.2019.03062>
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5<sup>th</sup> ed.). SAGE Publications.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2015). *How to design and evaluate research in education* (9<sup>th</sup> ed.). McGraw-Hill.
- Fraze, S., Smith, J. H., & Kistler, M. (2004). Perceptions of secondary principals in Texas concerning leadership skills attained through membership and participation in the FFA. *Journal of Southern Agricultural Education Research*, 54(1), 230-241. <http://jsaer.org/wp-content/uploads/2020/06/Volume-54-Full-Issue.pdf>
- Huston, M. (2020). *Determining how livestock SAEs impact student self-efficacy in completing skills associated with animal science*. [Unpublished master's thesis]. Texas Tech University.

- Kalme, N., & Dyer, J. E. (2000). Perceptions of Iowa secondary school principals toward agricultural education. *Journal of Agricultural Education, 41*(4), 116-124. <https://doi.org/10.5032/jae.2000.04116>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*, 607-610. <https://doi.org/10.1177/001316447003000308>
- Leithwood, K., & Montgomery, D. (1982). The role of the elementary principal in program improvement. *Review of Educational Research, 52*, 309-339. <https://doi.org/10.2307/1170421>
- Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education, 42*(4), 43-53. <https://doi.org/10.5032/jae.2001.04043>
- Martin, R. A., Nwozuzu, E., & Gleason, A. (1986). Perceived communications and support linkages of high school principals and vocational agriculture teachers. *Journal of the American Association of Teacher Educators in Agriculture, 27*(1), 18-26. <https://doi.org/10.5032/jaatea.1986.01018>
- National FFA Organization. (2020). *2020-2021 Official FFA Manual*. <https://ffa.app.box.com/s/z6bkjdmqd7e329a58a27e5xn1fzcqeqq>
- Pavelock, D. (2000). *Perceptions and perceived knowledge levels of Texas public school superintendents regarding the agricultural science and technology program* [Unpublished doctoral dissertation]. Texas Tech University.
- Pieniasek, R. (2019, September). Notes from the executive director. *Vocational Agriculture Teachers Association of Texas News*, p. 4.
- Pitner, N. (1988). The study of administrator effects and effectiveness. In N. Boyan (Ed.), *Handbook of research in educational administration* (pp. 99-122). Longman.
- Rangel, V. S. (2018). A review of the literature on principal turnover. *Review of Educational Research, 88*(1), 87-124. <https://doi.org/10.3102/003465431774319>
- Rayfield, J., & Wilson, E. (2009). Exploring principals' perceptions of supervised agricultural experience. *Journal of Agricultural Education, 50*(1), 70-80. <https://doi.org/10.5032/jae.2009.01070>
- Ross, D. J., & Cozzens, J. A. (2016). The principalship: Essential core competencies for instructional leadership and its impact on school climate. *Journal of Education and Training Studies, 4*(9), 162-176. <http://dx.doi.org/10.11114/jets.v4i9.1562>
- Rush, M. G., & Foster, R. M. (1984). The importance of selected activities affecting the role of vocational agriculture instructors as perceived by vocational agricultural instructors, principals, and superintendents in Idaho. *Journal of the American Association of Teacher Educators in Agriculture, 25*(4), 58-65. <https://doi.org/10.5032/jaatea.1984.04058>
- Shoemaker, R. G. (1972). *Images and perceptions of vocational agriculture programs in Mississippi*. (Research Series 2). Mississippi State University and Mississippi Department of Education. <https://files.eric.ed.gov/fulltext/ED069908.pdf>

Smith, A. G., & Myers, B. E. (2012). Perceptions of Florida secondary school principals toward agricultural education. *Journal of Agricultural Education*, 53(3), 154-165.  
<https://doi.org/10.5032/jae.2012.03154>

Talbert, B. A., Vaughn, R., Croom, D. B., & Lee, J. S. (2007). *Foundations of agricultural education* (2<sup>nd</sup> ed.). Professional Educators Publications.

Texas FFA Association. (2020). *Participate*. <https://www.texasffa.org/participate>

Walker, W. D., Garton, B. L., & Kitchel, T. J. (2004). Job satisfaction and retention of secondary agriculture teachers. *Journal of Agricultural Education*, 45(2), 28-38.  
<https://doi.org/10.5032/jae.2004.02028>

Warmbrod, R. J. (2014). Reporting and interpreting scores derived from Likert-type scales. *Journal of Agricultural Education*, 55(5), 30-47. <https://doi.org/10.5032/jae.2014.05030>