

# **NC-AAAE Research Poster Session Proceedings**

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*Jaclyn Tweeten and Jon Ulmer*

# **Perceptions of Interactions and Experiences of Youth and Adult Leaders in Leadership Roles within a Trade Industry**

*Jaclyn Tweeten and Jon Ulmer, Kansas State University*

## **Introduction/Theoretical Framework**

A concept that is based around finding the strengths of adolescents deriving from the developmental systems theory is positive youth development (PYD) (Lerner et al., 2005). The developmental systems theory demonstrates that as a person interacts with their current context it enhances their development (Hamilton et al., 2013). Youth and adult partnerships are an important part of a youth's environment and can influence their development (Zeldin et al., 2008).

The challenge within organizations is for adults to realize that young people should be more than just participants and become a part of the decision-making process (Zeldin et al., 2008). To feel empowered, young people need to feel that their responsibilities have a meaning, their voice is allowed and that the tasks, project, or the program makes a difference in the lives of others (Spreitzer, 1995). For the biggest growth potential, the adult/youth interactions must be maximized. To make the most out of the experiences we must first understand the current interactions and experiences.

### ***Intergroup Contact Theory***

Allport's (1954) Intergroup Contact theory is based on research around the Civil Rights Movement. In his theory he composed critical situational conditions that must exist to reduce prejudice among group members. In the context of this study, prejudice refers to stereotypes such as age, gender, attitudes, personalities, perceptions, and preferences towards an individual. Allport (1954) argued that by bringing different groups together in interactive settings that prejudices and biases would be reduced specifically among those within the ingroup (those that possess power, privilege, and status). Those within the ingroup would also have positive attitudes about the outgroup members (those that are less connected and seen as undesirable). However, to achieve the success of intergroup relations, he proposed that there must be at least four conditions that should be met. Those conditions include 1) equal status within the situation, 2) common goals, 3) intergroup cooperation, 4) support of authorities, customs, and laws.

Intergroup contact theory can be useful when discussing youth and adult interactions and the development of youth. This theory proposes the ideas that groups that interact and cooperate with each other can create equal voice as well as mutual learning while coming together for a common purpose or a goal (Allport, 1954). Similar to a youth development setting, where youth and adults come together to share a common purpose or a goal for a given project or program. When groups interact and create mutual learning, cooperate among each other, and have an equal status within a group, PYD can occur (Jones, 2004).

### **Research Purpose and Objectives**

Several researchers have studied PYD and youth and adult interactions in the context of 4-H and FFA (Hastings et al., 2011; Hennes & Ball, 2018). However, limited research exists on

how PYD and youth and adult partnerships are perceived in trade industry organizations and its overall impact on youth. The American Hereford Association (AHA) has the desire to improve experiences for the young people and it is important to understand the experiences had by junior board members as well as ambassadors in the AHA. Understanding the lived experiences of the junior board members, ambassadors, and the adults within the Hereford Association will allow researchers to offer recommendations to help the Hereford Association better serve youth in their organization. The following objectives will guide this study.

1. Describe the perceptions of youth and adult interactions by those in youth leadership positions and the adult leaders of the American Hereford Association.
2. Describe the experiences of youth and adult leaders in a leadership role within the American Hereford Association.

### **Methods/ Procedure**

The design of this study is a mixed methods study, specifically an explanatory sequential design (Toyon, 2021). The target population for this research study consisted of previous and current junior board members, previous ambassadors, volunteers, and staff within the American Hereford Association (N =80). The AHA is a nonprofit organization that delivers and designs programs for young people, provides services for their members, supports youth leadership development, and research while promoting the Hereford breed.

Researchers modified the Interaction and Involvement Rating scale to address the perceptions of junior board members, ambassadors and adults all working together within the AHA. The Involvement and Interaction Rating scale measures the perceptions and involvement of youth and adults while working together. Researchers modified the Involvement and Interaction Rating scale to address the perceptions of junior board members, ambassadors and adults all working together within the AHA on various events like the National Junior Hereford Expo and Leadership Conferences. Both youth and adults were asked to rate their perceptions on a 10-point scale with constructs that included youth, adult involvement, and youth and adult interactions. There were two sections that were added to the Involvement and Interaction Rating scale to fit the needs of this study, these two sections included junior board involvement and ambassador involvement. Jones (2004) developed the instrument and used a ten-point scale, 10-9 (excellent), 8-7 (good), 6-5 (fair), 4-3 (poor), 2-1 (very poor). Within the instrument, questions included various items that were formatted as reverse statements (ex: a positive and a negative statement). Items and statements from the Involvement and Interaction Rating scales with added sections had a total of 67 statements. These statements as indicated by Jones (2004) were designed from previous research from existing instruments (Camino, 2000, Yohalem, 2003, Zeldin et al., 2008). The Likert type statements/items were interval in nature to fit the context of previous researchers (Bading et al., 2011, Jones, 2004). Statements were reverse coded as needed to reflect a positive perspective.

Cronbachs alpha was measured to test for reliability of the instrument and each construct measured above .60. According to Churchill (1979) Cronbach's alpha of .60 or higher is acceptable. The instrument contained three constructs of youth involvement, adult involvement, and youth and adult interactions. To fit the context of this study, youth involvement included two

constructs: junior board involvement and ambassador involvement. Adult involvement included the adult involvement with youth, and the youth and adult interaction construct included youth and adult interaction, and the junior board and ambassador involvement.

Participants were contacted through Qualtrics email distribution service, which contained a link to the survey following the recommendations of Dillman et al., (2014). Means, Standard Deviations, and Analysis of Variance (ANOVA) were calculated using SPSS software. An Analysis of Variance reveals any differences between junior board members, ambassadors, and adults in their ratings of the perceptions of interactions between youth and adults. The ANOVA was used to determine if there were any statistical differences between positions (junior board member, ambassador, volunteer, or staff) on their rating of perceptions of youth and adult interactions. Nonresponse errors were handled by comparing early to late respondents and no statistical differences were found, therefore one can generalize the results to the larger population of the study (Linder et al., 2001).

To determine the experiences of the youth and the adults, one-on-one semi structured interviews were conducted. All 80 participants were invited to participate through email. There were 12 individuals that volunteered to be a part of the interview process. Once the transcripts were recorded on Zoom, they were copied onto a Microsoft Word document, where all identification was removed, and the names of participants were changed to pseudonyms. The transcripts were reviewed and read over, and thematic coding was conducted. Once familiar with the data, initial themes began to develop. Each theme was then transferred into an Excel document and then analyzed into codes (Ary et al., 2010).

## **Results/Findings**

### **Quantitative**

Of the 80 individuals, 67 chose to respond to the survey. Of the 67 responses, 59 of the responses were useable for the study resulting in a response rate of 74%. Of the 59, 11 (18.6%) were previous ambassadors, 11 (18.6%) were current junior board members, 18 (30.5%) were previous junior board members, 10 (16.9%) were adult volunteers within the AHA, and 9 (15.3%) were adult staff members in the AHA. Of the respondents, 36 (61%) were female and 23 (39%) were male.

An ANOVA showed statistical significance between previous junior board members, adult volunteer leaders and AHA staff of their perceptions of 'adults are very considerate of youth opinions'  $F(4, 25.49) = 3.33, p = .029$ . A Tamhane T2 post hoc test was utilized as there were unequal variances and it is a conservative measure (DeMuth, 2006). The Tamhane T2 post hoc test revealed that previous junior board members rated their perceptions lower ( $M = 6.44, SD = 2.17$ ) than adult volunteers and leaders ( $M = 8.60, SD = 1.26$ ) as indicated by the negative mean difference ( $MD = -2.15$ ) with a low effect size ( $\eta^2 = .18$ ) (Davis, 1971).

The Tamhane T2 post hoc test also revealed that previous junior board members rated their perceptions lower ( $M = 6.44, SD = 2.77$ ) than adult staff in the AHA ( $M = 8.44, SD = 1.01$ )

on their perceptions of ‘adults are very considerate of youth opinions’, indicated by a negative mean difference ( $MD = -2.00$ ) with a low effect size ( $\eta^2 = .18$ ) (Davis, 1971).

Statistically significant differences occurred between current junior board members, previous junior board members and adult volunteers on their perceptions of the statement youth engage in respectful conversations as identified by the Tamhane T2 post hoc test. Current junior board members rated their perceptions of youth and adults engage in respectful conversations higher ( $M = 9.81$ ,  $SD = .404$ ) than previous junior board members ( $M = 9.18$ ,  $SD = 1.07$ ). The positive mean difference of 0.63 indicated a medium to large effect size ( $\eta^2 = .117$ ). The Tamhane T2 post hoc test also revealed that current junior board members rated themselves higher ( $M = 9.81$ ,  $SD = .404$ ) than adult volunteers ( $M = 8.70$ ,  $SD = .948$ ) on their perceptions of youth and adults engage in respectful conversations which indicated a positive mean difference of 1.11 with a medium to large effect size ( $\eta^2 = .117$ ).

## **Qualitative**

### **Youth Experiences**

#### **Youth Voice**

From the junior board perspective, youth voice was heard specifically during meetings. From the ambassador standpoint many felt that their voices were not used as much during the Junior National Hereford Expo but were given the opportunity to express their concerns at the end of the internship experience as Alice, previous ambassador, said,

The adults would tell us hold on to what you like and what you don't like about this internship experience, and we will have a meeting and talk about it [...] and literally the adults sat down with us for at least two hours to [...] um talk about it [...] like what should we do differently next year, what should we keep the same.

She adds that she felt great about getting the opportunity to voice her concerns where they discussed everything about the job, and what the association could do differently with the internship.

However, some felt that their voices were not heard by the adults, Cora, previous junior board member, indicated her feelings about sharing her thoughts and said, “I was more disappointed when an adult would reject my ideas rather than a peer as it was almost always more reassuring from the peer.” She followed by saying that “a peer was one of the team.” It was almost like she knew that if a peer did not like her ideas, then it more than likely was not best for the team or the event. Although some individuals did not have as great of an experience with their peers and expressing their voices Rachel, previous ambassador, shared about her thoughts of voicing her opinion while at the event, “when your voice was not heard, it made you feel unappreciative and looked over like no one cared about you.” Alice, previous ambassador shared, “I felt like my opinions and ideas did not matter to them [other youth leaders], but it was accepted by the adult.”

### **Adult Experiences**

#### **Youth Responsibilities**

Youth responsibilities was a subtheme that was developed from the experience theme. Youth responsibilities indicated that youth were responsible to carry out tasks and duties and taking the initiative to complete the task.

All the adults believed that their experiences with the youth leaders were great and that they were able to fulfill their roles while serving in the leadership position. As an adult volunteer, George indicated “the work that they do is tremendous and the working relationship between the youth and the adult is great.” Jill, adult volunteer, identified that in her experiences with working with the ambassadors “they provide such a great service uh at the National Junior Hereford Expo, just all the work that they put in and helping uh the staff throughout the week, so we are very appreciative of uh what we’ve seen them do and will continue to do.” From Jane’s perspective, she believes that “youth recognize how to solve our adult problems because they are the ones that are living in it” meaning that the Hereford organization is a youth organization and the youth know what is best for the youth while in their leadership roles.

The adults also felt that the youth were accountable in their role, and were responsible for certain tasks, one of these tasks is for the youth to select the judges for the junior national Hereford Expo, “they select judges for the junior nationals and are accountable to their selections, uh which I think is uh just recently happened in the last few years to my knowledge,” George said. In reference to selecting judges Jill has had experiences with other adult members who have indicated that they really want to see the junior board select the judges for the Junior National, Jill indicates from this experience “it was just one of those things that in judges selection, there are a lot of breeders who want the junior members to have as much say as they possibly can in selecting judges for the junior shows”, she later adds, “that’s something that’s really big to the members.”

In referencing youth responsibilities, as an adult, George added, “the best way to learn is to make your own decisions and be accountable for it”, Additionally he believes “if things go wrong, you try and fix them, you address them and the best way to do that is if we turn that role back to the juniors, so I think the work with the juniors is tremendous.”

## **Conclusions**

It can be concluded that adult participants were more positive in their interactions with youth as compared to the youth perceptions. Statistically significant differences revealed that adult volunteer leaders and staff perceived themselves as being more positive in their consideration of youth opinions than what the previous junior board members perceived. Additionally, adult staff believed they were more considerate of youth opinions than what the previous junior board members indicated. This means that youth felt as though their opinions and voices were not heard as much as the adult staff believe them to be. As adult staff were more positive in their overall ratings, this is congruent to the work of Jones (2004) who indicated that adults were more positive than youth when working together and being considerate of each other’s opinions. In addition, even when the adult says that youth voices are heard, the youth may not perceive their voices to be heard. Qualitative results revealed that both youth and adults believed that their experiences and working with each other were great. Youth specifically mentioned how the adults were helping the community or the Hereford Organization grow. In addition, adults felt that the youth were responsible enough and carried out their leadership roles



well. Youth also felt that the adults provided them with the opportunity to express their voices during meetings and events.

### **Recommendations/ Implications**

This research has several implications for those working with young people. One of the implications is that young people may not express and perceive that their voices are being heard when they are not asked for it. It is recommended that the adult asks and communicates with the young person and asks for their opinions of the subject. This study also has implications for what youth and adult relationships should look like within a trade industry. Youth and adults should have a positive working relationship which consists of positive communication and respectful conversations. If communication is positive, then positive youth development can occur. This research study also has implications for what youth leadership should look like within a trade industry organization. If interactions with youth and adult leaders are positive within the organization, positive youth development can occur, and young people can develop leadership skills.

It is recommended that positive interactions remain within the trade industry, specifically the AHA. If the AHA continues to interact positively with their members, young people may feel as if they belong in the association and that their opinions matter to the adult. Future research is needed to determine what is meant by being heard within an organization. This research revealed that although adults felt they were listening to the youth, the youth did not feel heard because their ideas may not have been implemented. This leads researchers to believe that there are two sides to what is meant by 'being heard' a youth and an adult perspective. Understanding what 'being heard' means by both youth and adults will help to clarify any misunderstandings in their perceptions. In addition, future research may be needed to understand the assumptions that adults make of youth and that youth make of adults. Is it safe to say that because the adult feels that the youth is being heard that the youth believe they are being heard? Future research on the topic of perceptions and understandings will help clarify what is meant by being heard and how to bring both youth and adults' understandings together.

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# **Agricultural Teachers Entrepreneurial Competencies and Relevance of Entrepreneurship Knowledge to their work**

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## **Introduction/Need for research/ Literature review**

Agriculture teachers are tasked with creating meaningful learning experiences, both in and out of the classroom, to prepare students for higher education and careers (Barrick, 1992; Phipps et al., 2008). One strategy to build students' career skills and competencies is helping students plan and conduct their Supervised Agricultural Experiences [SAE] (Barrick et al., 1991; Phipps et al., 2008). As part of their SAE, some students engage in entrepreneurial ventures under the mentorship of their teachers. Entrepreneurship is a critical aspect of school-based agricultural education (SBAE) curriculum, especially the SAE (Brown & Knobloch, 2022; Phipps et al., 2008). *SAE for All* curriculum suggests students should strive to transition ownership SAEs into viable entrepreneurial business ventures by accounting for all financial and non-financial resources, analyzing financial records, and creating a business plan (Barrick, 1992; The Council, 2023). *SAE for All* also includes school-based enterprise as another form of entrepreneurial immersion SAE for students (The Council, 2023).

Due to the interdisciplinary nature of SBAE curriculum, students often, whether knowingly or unknowingly, synthesize concepts from both the social and natural sciences when developing and implementing ideas for their SAE projects. Consequently, in shaping learners' SAE experiences, teachers draw on their interdisciplinary expertise and a deep understanding of various subjects to guide and mentor students (Barrick, 1989; Mukembo, et al., in press). This guidance encompasses business and entrepreneurship concepts, which are integral to students' projects (Barrick, 1992; Heinert & Roberts, 2018) and vital for their future career success.

For agricultural teachers to effectively advise students in their entrepreneurial pursuits, they ought to possess knowledge, skills, and competencies related to entrepreneurship. Unfortunately, many agriculture teachers receive little, or no training related to entrepreneurship during their teacher preparation courses (Tummons, 2023), potentially limiting their ability to provide successful guidance to students on entrepreneurial efforts. Furthermore, despite the integration of entrepreneurship into the high school agricultural curriculum (Heinert & Roberts, 2017, 2018; Mukembo, 2017; Phipps et al., 2008), there has been limited emphasis on exploring the entrepreneurial competencies possessed by agricultural teachers, and how they acquire these competencies to excel in their roles. To address this gap, there is a need to understand the entrepreneurial competencies of agricultural teachers, including potential requirements for professional development in this area.

## **Theoretical Framework**

Researchers employed the theory of Human Capital Theory (HCT) as a guiding framework for this inquiry (Becker, 1993; Schultz, 1961). Proponents of HCT argue that individuals can augment their potential future earnings and quality of life by actively investing in their education (Becker, 1993) to improve their knowledge and abilities (Hornbeck & Salamon, 1991), thereby realizing a return on their investment (Schultz, 1960, 1972). Additionally, individuals can continuously enhance their human capital through lifelong learning and other professional development opportunities. These opportunities can boost self-efficacy and competencies in performing certain tasks to increase productivity (Hartog & Van den Brick, 2007).

Furthermore, since this study involved evaluating teacher's entrepreneurial competencies, we integrated the Competency-Based Theory (CBT). CBT posits that specific competencies can be identified and measured based on an individual's behaviors and actions (Klein-Collin, 2013; Makulova et al., 2015). It also suggests that individuals can receive training to improve their personal competencies within a particular field, such as entrepreneurship, to accomplish specific goals and tasks (Morris et al., 2013; Schenkel et al., 2022), thereby contributing to their human capital (Venesaar et al., 2022).

### **Purpose of the Study**

The purpose of this study was to assess the perceived entrepreneurial competencies of training needs of agricultural teachers, as well as to determine the relevance of entrepreneurship knowledge to their work.

### **Objectives:**

1. Assess the perceived entrepreneurial competencies of agricultural teachers.
2. Explore teacher's perspectives regarding the significance of entrepreneurship knowledge in their work.
3. Determine whether there are differences in the perceptions of male and female agricultural teachers regarding the importance of entrepreneurship knowledge to their work.
  - a. Ho: There are no significant differences between male and female agricultural teachers concerning the importance of entrepreneurship knowledge in their work.
4. Ascertain the perceived demand among agricultural teachers for professional development in entrepreneurship.

### **Methodology**

This *ex post facto* quantitative study utilized survey methodology conducted through an online Qualtrics survey. The survey questions were adapted from two established instruments measuring entrepreneurial competencies, originally developed by Morris et al. (2013) and Mukembo (2017). To ensure the survey's quality, a panel of experts from the Division of Applied Social Sciences at the University of Missouri reviewed its content and face validity (Creswell, 2014). The study received approval from the University of Missouri's Institutional Review Board. Subsequently, we conducted a pilot test of the instrument with 26 student

teachers from the state of Oklahoma. We used the feedback we got from the pilot test to refine the final instrument, focusing on its length, readability, and reliability. We calculated Cronbach's alpha coefficient to assess internal consistency, removing single-item prompts which reduced construct reliability.

The final instrument comprised of 12 constructs measuring various entrepreneurial competencies, including Creative problem solving ( $\alpha=0.83$ ), Innovativeness ( $\alpha =0.79$ ), , Leadership ( $\alpha=0.72$ ), Resilience ( $\alpha=0.82$ ), Networking and social ( $\alpha=0.80$ ), Visionary and future orientation ( $\alpha=0.81$ ), Risk management techniques ( $\alpha=0.73$ ), Opportunity recognition competencies ( $\alpha=0.83$ ), Opportunity exploitation ( $\alpha=0.86$ ), and opportunity assessment competencies ( $\alpha=0.73$ ), Independent or autonomous ( $\alpha=0.65$ ), and Tenacity and perseverance ( $\alpha=0.69$ ). These reliability coefficient estimates were all considered acceptable (Field, 2013; Murphy & Davidshofer, 1988; Tavakol & Dennick, 2011).

We distributed the Qualtrics questionnaire to all agriculture teachers in the state of Missouri ( $N = 535$ ), accompanied by three weekly follow-up email reminders to nonrespondents. A total of 301 surveys were completed, resulting in a response rate of 56.26%. To encourage participation, respondents were offered an incentive to have their names entered into a drawing for a chance to win one of the 10 Amazon gift cards, each valued at \$50. We excluded 44 participants who submitted empty surveys, leaving us with 257 valid responses. Based on the population ( $N=535$ ), our response rate met the threshold for acceptable sample size proposed by Krejcie and Morgan (1970).

## Findings/Results

### Objective #1: Assess the perceived entrepreneurial competencies of agricultural teachers.

Agricultural teachers were assessed on 12 entrepreneurship competency constructs using summated Likert scales. Teacher entrepreneurship competences were ranked on overall mean scores (see Table 1). The top four entrepreneurship competences possessed by the respondents (mean > 4.0) were Independence or autonomy ( $M = 4.34$ ,  $SD = 0.52$ ); Leadership skills ( $M = 4.07$ ,  $SD = 0.42$ ), Opportunity assessment ( $M = 4.07$ ,  $SD = 0.47$ ) and Resilience ( $M =4.00$ ,  $SD = 0.46$ ). The lowest two entrepreneurship competences based on the overall mean score were Innovativeness ( $M = 3.55$ ,  $SD = 0.60$ ) and Networking and social skills ( $M = 3.27$ ,  $SD = 0.77$ ).

Of note, when we examined the mean scores of the teachers on each competency based on their sex and whether they had received entrepreneurship training during their teacher preparation course work, we observed some subtle variations. For instance, among agricultural teachers who indicated receiving entrepreneurship training during their teacher preparation course work, males generally had slightly higher mean scores in 10 out of the 12 entrepreneurship competencies. The exceptions were the entrepreneurship competency of "being visionary," where females had a slightly higher mean score ( $M = 4.17$ ,  $SD = 0.50$ ) and "leadership skills," where both sexes were tied ( $M = 4.06$ ). On the other hand, for teachers who had not received entrepreneurship training, females had slightly higher mean scores in five of the 12 entrepreneurship competencies, including "leadership" ( $M = 4.08$ ,  $SD = 0.40$ ), "Visionary" ( $M = 3.92$ ,  $SD = 0.49$ ), "Opportunity exploitation" ( $M = 3.86$ ,  $SD = 0.58$ ),

“Tenacity/perseverance” ( $M = 3.66$ ,  $SD = 0.54$ ), and “Opportunity recognition” ( $M = 3.61$ ,  $SD = 0.67$ ). Male agriculture teachers who indicated not having received entrepreneurship training during their teacher preparation course work had slightly higher mean scores in seven out of the 12 entrepreneurship competencies, namely “Independence” ( $M = 4.38$ ,  $SD = 0.49$ ), “Opportunity assessment” ( $M = 4.14$ ,  $SD = 0.48$ ), “Resilience skills” ( $M = 4.02$ ,  $SD = 0.50$ ), “Creative problem solving” ( $M = 3.81$ ,  $SD = 0.64$ ), “Risk management techniques” ( $M = 3.74$ ,  $SD = 0.57$ ), “Innovativeness” ( $M = 3.60$ ,  $SD = 0.63$ ), and “Social networking” ( $M = 3.22$ ,  $SD = 0.81$ ), as shown in Table 1.

**Table 1**

*Perceived entrepreneurial competencies of agricultural teachers. (n=235)*

Entrepreneurship Competency Ranking*	Overall mean (SD) N=235	No training n=184		Training n=51	
		Female n=96	Male n=88	Female n=23	Male n=28
Independent or autonomous	4.34 (0.52)	4.34 (0.53)		4.38 (0.50)	
		4.29 (0.55)	4.38 (0.49)	4.26 (0.51)	4.48 (0.48)
Leadership skills	4.07 (0.42)	4.07 (0.42)		4.06 (0.43)	
		4.08 (0.40)	4.05 (0.44)	4.06 (0.42)	4.06 (0.43)
Opportunity assessment	4.07 (0.47)	4.06 (0.46)		4.07 (0.48)	
		3.99 (0.44)	4.14 (0.48)	4.02 (0.54)	4.11 (0.42)
Resilience skills	4.00 (0.46)	4.00 (0.46)		4.02 (0.48)	
		3.98 (0.44)	4.02 (0.50)	3.98 (0.54)	4.06 (0.42)
Visionary	3.93 (0.53)	3.92 (0.53)		3.97 (0.49)	
		3.92 (0.49)	3.91 (0.58)	4.17 (0.50)	3.79 (0.45)
Opportunity Exploitation	3.85 (0.57)	3.82 (0.61)		3.93 (0.41)	
		3.86 (0.58)	3.78 (0.65)	3.90 (0.40)	3.96 (0.41)
Creative Problem Solving	3.81 (0.65)	3.79 (0.65)		3.89 (0.62)	
		3.76 (0.66)	3.81 (0.64)	3.76 (0.61)	3.99 (0.63)
Tenacity/ Perseverance	3.68 (0.54)	3.65 (0.57)		3.79 (0.40)	
		3.66 (0.54)	3.65 (0.61)	3.70 (0.45)	3.87 (0.35)
Risk management techniques	3.65 (0.56)	3.62 (0.58)		3.73 (0.49)	
		3.50 (0.57)	3.74 (0.57)	3.67 (0.63)	3.79 (0.35)
Opportunity recognition	3.62 (0.64)	3.60 (0.65)		3.69 (0.55)	
		3.61 (0.67)	3.57 (0.64)	3.54 (0.61)	3.82 (0.47)

Entrepreneurship Competency Ranking*	Overall mean (SD) N=235	No training n=184		Training n=51	
		Female n=96	Male n=88	Female n=23	Male n=28
Innovativeness	3.55 (0.60)	3.50 (0.62)		3.72 (0.51)	
		3.41 (0.60)	3.60 (0.63)	3.58 (0.55)	3.82 (0.46)
Social Networking	3.27 (0.77)	3.19 (0.79)		3.55 (0.63)	
		3.16 (0.76)	3.22 (0.81)	3.49 (0.67)	3.60 (0.61)

Note: \*Ranking was based on overall mean scores of all participants on the entrepreneurship competency. Scale was 1=*strongly disagree*, 2= *disagree*, 3= *neither agree nor disagree*, 4= *agree*, 5= *strongly agree*.

### Objective #2: Explore teacher’s perspectives regarding the significance of entrepreneurship knowledge in their work.

A large majority of teachers ( $n = 247, 96.1\%$ ; see Table 2) *strongly agreed* or *agreed* entrepreneurship knowledge was very relevant to their work. Only 1.2% ( $n = 3$ ) *strongly disagreed* or *disagreed* with the importance of entrepreneurship knowledge and 2.7% ( $n = 7$ ) neither agreed nor disagreed with this statement.

**Table 2**

*Agricultural teacher’s perspectives regarding the significance of entrepreneurship knowledge in their work. (N=257).*

Entrepreneurship knowledge is relevant in my work as an agriculture teacher	<i>n</i>	%
Strongly Agree	126	49.0%
Agree	121	47.1%
Neither Agree nor Disagree	7	2.7%
Disagree	1	0.4%
Strongly Disagree	2	0.8%

### Objective #3: Determine whether there are differences in the perceptions of male and female agricultural teachers regarding the importance of entrepreneurship knowledge to their work.

A univariate analysis of variance (ANOVA) was used to determine whether there are differences in the perceptions of male and female agricultural teachers regarding the importance of entrepreneurship knowledge to their work. The assumption of homogeneity of variance was tenable, as Levene’s test  $F(1, 233) = .695, p = .405$  was not statistically significant. We failed to reject the null hypothesis because no statistically significant differences existed between male and female agricultural teachers ( $F(1, 233) = .133, p = .716, \eta_p^2 < .001$ ) concerning the

significance of entrepreneurship knowledge in their work. Both male ( $M = 4.43$ ,  $SD = .713$ ) and female teachers ( $M = 4.46$ ,  $SD = .594$ ) had higher means regarding the importance of entrepreneurship knowledge to their work.

**Table 3**

*Differences between male and female teacher's perceptions regarding the importance of entrepreneurship knowledge to their work as agriculture teacher (N=257).*

Predictor	SS	df	MS	F	p	Partial Eta Squared ( $\eta_p^2$ )
Intercept	4645.74	1	4645.74	10821.54	<0.001	0.98
Sex	0.06	1	0.06	0.13	0.716	0.01
Error	100.03	233	0.43			
Total	4747.00	235				

a. R Squared = .001 (Adjusted R Squared = -.004)

b. Computed using alpha = .05

**Objective #4: Ascertain the perceived demand among agricultural teachers for professional development in entrepreneurship.**

A large majority of teachers ( $n = 237$ , 92.2%; see Table 4) *strongly agreed* or *agreed* that teachers should receive training in entrepreneurship. Only 1.6% ( $n = 4$ ) *strongly disagreed* or *disagreed* with the need for entrepreneurship training and 6.2% ( $n = 16$ ) neither agreed nor disagreed with this statement.

**Table 4**

*Agricultural Teachers perceived demand for professional development in entrepreneurship to help them be effective in working with students SAE -entrepreneurship projects (N= 257).*

	n	%
Strongly Agree	81	31.5%
Agree	156	60.7%
Neither Agree nor Disagree	16	6.2%
Disagree	3	1.2%
Strongly Disagree	1	0.4%

**Conclusions/Recommendations/Implementations**



On average, teachers either *agreed* or *strongly agreed* ( $\mu \geq 3.51$  on a scale of 1-5) that they possessed entrepreneurship competencies in Independence/Autonomous, Leadership skills, Opportunity assessment, Resilience, Visionary, Opportunity Exploration, Creative problem solving, Tenacity/Perseverance, Risk management techniques, Opportunity Recognition, and Innovativeness. The only entrepreneurship competence that received a mean score of less than 3.5 was Social. A large majority of teachers *strongly agreed* or *agreed* that entrepreneurship knowledge was relevant to their work. Therefore, it is essential for teachers to receive entrepreneurship training as part of their teacher preparation courses to effectively advise students in their entrepreneurial endeavors. We recommend teacher preparation institutions integrate entrepreneurship courses into their teacher training curriculum to enhance teacher's entrepreneurship knowledge and related competencies, thereby building their human capital (Becker, 1993; Schultz, 1961; Venesaar et al., 2022). There were no statistically significant differences between male and female agricultural teachers regarding the importance of entrepreneurship to their work. The teachers indicated that entrepreneurship knowledge was significant to their work. In addition, we identified a strong need for professional development in entrepreneurship among agricultural teachers to help them effectively work with students on SAE - entrepreneurship projects. Therefore, in-service professional development opportunities could be provided to improve teachers' entrepreneurship knowledge and competences, particularly in areas such as social networking where the mean scores were low.

We observed some subtle variations in entrepreneurship competences between male and females' teachers concerning their perceived entrepreneurial competencies. In both groups, male agricultural teachers generally had slightly higher mean scores in most competencies. For instance, among the group that indicated receiving entrepreneurship training during their teacher preparation, males had slightly higher means in 10 out of the 12 entrepreneurship competencies. Among those who had not received entrepreneurship training during their teacher preparation course work, males also scored slightly higher in 7 out of 12 entrepreneurship competences. Could this be indicative of the perceived entrepreneurial competencies among females being generally lower than those of males, as previously reported by Coleman and Robb (2017) and other entrepreneurship scholars? This observation warrants further investigation to determine why females scored slightly lower in certain competencies compared to males, despite sharing a similar perspective on the importance of entrepreneurship knowledge to their work. We recommend further research employing causal-comparative designs to assess how entrepreneurship skills impact student's adoption of entrepreneurial SAE projects. We also suggest further investigation into how agriculture teachers who did not receive entrepreneurial training during their teacher preparation utilize external resources to coach entrepreneurial students.

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## **Employer Attractiveness for Alumni of the National FFA Organization: What is Important to Generation Z?**

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### **Introduction**

Workplace attractiveness refers to the benefits prospective employees expect from working for a company. More so, Williams (2013) described workplace attractiveness as the primary factor influencing how people perceive a company and how it relates to employer branding tactics. In other words, workplace attractiveness refers to a person's overall desire to work for a particular company. With the emergence of new generations in the workforce comes new workplace values. It is critical to understand what draws a prospective employee from this perspective. When Millennials first entered the workforce, their values were distinct from those of Generation X and Baby Boomers (Schullery, 2013). It is expected that the newest generation will also be distinct from Millennials and previous generations.

The term "generation" refers to a distinct population that shares birth years, age locations, and key life events at crucial developmental periods (Kupperschmidt, 2000). Generations span approximately 16–18 years, split into an initial wave, a main group wave, and a final wave, each lasting about the same number of years. The Pew Research Centre (Dimock, 2019) defined Generation Z (Gen Z) as those born between 1997 and 2012. Members of Gen Z were born around the start of the new century during two recessionary periods. Social media has always existed for members of Gen Z, and they have become known as digital natives. They have grown up during a time of ubiquitous technology and have a stronger connection to technology and the internet than previous generations. In the upcoming years, members of this generation will start working, yet little has been learned concerning their traits, requirements, qualities, and working methods (Singh & Dangmei, 2016).

Gabrielova and Buchko (2021) stated that Gen Z, also known as the "iGen" generation because their lives have always included the internet, is currently joining the workforce. Their phones have always been "smart. Typically, personal or laptop computers were present in both their homes and classrooms. In 2013, the first members of the Generation Z cohort began their high school careers, and in 2017, they began their college careers. These individuals are the upcoming generation of workers, numbering about 74 million.

According to Al-Asfour and Lettau (2014), employers must get ready for Generation Z, which is just now entering the workforce and will hold all entry-level positions in the United States by 2030. The expectations that employees have of their workplaces vary from generation to generation because they are different from one another, just as human desires and needs differ. According to Baş and Ertan (2020), businesses must employ the proper individuals with potential if they want to be sustainable. The business landscape has many opportunities, so skilled

individuals are able to search for the best jobs. Increasing workplace attractiveness is an important strategy for employers to recruit the best employees for their own businesses.

The U.S. Chamber of Commerce (Ferguson, 2023) reported job openings in 2023 exceeded the number of unemployed workers by a 2 to 1 ratio. The Chamber stated that companies across its membership were having difficulty finding workers to fill openings. The entry of Generation Z into the labor sector will bring about some adjustments for hiring managers. Future employees place a high value on work-life balance, teamwork, autonomy, support, flexibility, involvement, and creativity. They also expect to have opportunities to be entrepreneurs who are lifelong learners (McCrinkle & Fell, 2019).

This study addresses the need for the agricultural industry to recruit and retain an adequate workforce supply, especially from the newest entrants who belong to Generation Z. We currently do not know the gap between what is important to Generation Z and what is offered by the agricultural industry. The results of this study can guide School-Based Agricultural Education in its preparation of students for agricultural careers while ensuring the industry's continual growth and relevance by aligning education, career pathways, and employer engagement with the preferences of Generation Z.

### **Theoretical Framework**

The attraction-selection-attrition theory (Schneider, 1987) states that people are drawn to companies they feel have similar attitudes, beliefs, and values to them. According to the theory, people do not join organizations at random; instead, they choose to join and leave them. Ritz et al. (2011) explained the attraction-selection-attrition framework (ASA), which focuses on people's self-selection into environments they want to work in and out of environments they do not fit in, is based on this fundamental tenet. Major features of ASA include values, work environment, nature of the job, and culture. Chapman et al. (2005) described the factors that most strongly correlated with job and workplace attractiveness. These were the types of work, working conditions, cultural norms, company image, employee-employer fit, and opinions of hiring process. To better understand employer attractiveness, Berthon et al. (2005) created the Employer Attractiveness scale (EmpAt), which looks at the phenomenon from a marketing-centric perspective (Puri 2018). Berthon et al. reported Cronbach's alpha of .96 for the instrument.

### **Purpose**

This was an exploratory study. The purpose of this study was to describe workplace attractiveness factors for FFA members belonging to Generation Z. Additionally, we wanted to describe any relationships between FFA members' demographics and workplace attractiveness factors.

## **Research Questions**

1. What factors of employer attractiveness are considered important to FFA members belonging to Gen. Z?
2. What is the relationship between the respondents' demographics and the factors/values of employer attractiveness?

## **Methods/Procedures**

We conducted the study in the spring of 2023 using Qualtrics. We used the EmpAt instrument (Berthon et al., 2005) to measure Employer Attractiveness for National FFA Organization members and alumni. The stem asked respondents to rate each statement for working for an agricultural company. The EmpAt instrument consists of 25 statements loaded into five scales (social value, development value, economic value, interest value, application value) that measure the extent to which an individual is attracted to an employer. Additional demographics questions were also included.

The participants of this study were in three categories: FFA Alumni and Supporters members who were past FFA members and graduated high school 2018-2022, American FFA Degree recipients who graduated high school 2018-2021, and Forever Blue Network members who were past FFA members and graduated high school 2018-2022. National FFA Organization provided email addresses and state for each category's population. The initial sample of 1,500 consisted of 500 from each category randomly selected proportionally by FFA Region. Several bad emails were returned resulting in a final sample size of 1,274. For the FFA Alumni and Supporters and American Degree categories, many of the email address domains were for a high school, therefore it is likely the addresses were outdated. However, the Forever Blue Network members category had fewer school-based email addresses and fewer emails returned as bad.

We emailed the survey individually to each participant through Qualtrics following Dillman et al. (2014) tailored design methodology. Useable responses were received from 146, resulting in a response rate of 11.5%. Early versus late responses were compared (Lindner et al., 2001) with no statistically significant differences found. Due to the low response rate, these findings only apply to the population represented by the respondents. One-way ANOVAs were conducted for demographics and EmpAT scales (.05 significance level set a priori).

## **Findings/Results**

Table 1 shows the demographic profile of the respondents. Those that graduated in 2018 or earlier were a plurality (43%), while those that graduated in 2022 were the lowest percentage (7.5%). There were more female respondents (67%) than male respondents (32%), with less than 1% identifying as non-binary. Regarding ethnicity/race, 0.7% responded as American Indian (member of a recognized tribe) or Alaska Native, 1.4% as Asian or Asian American, 1.4% as Biracial or Multiracial, 3.5% as Hispanic, Latino, or Latinx, 2.1% preferred not to answer, and 91% of the respondents identified as White. The survey's question about receiving free or

reduced lunch at their schools was designed to assess the participants socioeconomic status as much as possible. 71% answered that they did not receive free lunch; 2% of them preferred not to answer, while 27% indicated they received free lunch.

Table 2 shows the respondents' EmpAt scale scores. The scales are arranged from the highest to the lowest mean. Social Value, which includes a positive working environment, had the highest mean. Development Value, concerned with employee recognition, self-worth, and development; Economic Value, concerned with financial aspects such as competitive salaries, compensation packages, job security, and promotion opportunities; and Interest Value, those encompassing an interesting and demanding career and encouragement of innovation and creativity had lower means. Application Value, an employer providing employees with the opportunity to apply their expertise and share their knowledge with others, had the lowest mean.

**Table 1**  
*Respondents' Demographics (n = 144)*

		<i>F</i>	<i>%</i>
Year of Graduation	2018/earlier	62	43.0
	2019	21	14.4
	2020	30	21.0
	2021	20	13.7
	2022	11	7.5
	Total	144	100.0
Gender	Female	97	67.3
	Male	46	32.0
	Non-Binary	1	0.7
	Total	144	100.0
Ethnicity/Race	American Indian	1	0.7
	Asian American	2	1.4
	Biracial/Multiracial	2	1.4
	Hispanic/Latino/Latinx	5	3.5
	Prefer not to answer	3	2.1
	White	131	90.9
	Total	144	100.0
Received Free Lunch	No	102	70.8
	Prefer not to answer	3	2.1
	Yes	39	27.1
	Total	144	100.0



**Table 2***Respondents' EmpAt Scores*

	N	Minimum	Maximum	<i>M</i>	<i>SD</i>
Social Value	143	1	7	5.94	.90
Development Value	143	1.2	7	5.78	.89
Economic Value	144	1.2	7	5.77	.98
Interest Value	143	2	7	5.65	.96
Application Value	141	1.4	7	5.57	1.02

*Note.* Possible scale values: 1 = To a very little extent. 2 = To a little extent. 3 = To a small extent. 4 = to a moderate extent. 5 = To a large extent. 6 = To a great extent. 7 = To a very great extent.

One-way ANOVAs were conducted for demographics and EmpAt scales. None were significant at the a priori .05 level.

### **Conclusions Discussion/Implications**

The typical respondent graduated high school in 2018 or earlier, was female, identified as White, and did not receive free or reduced lunch in high school. The respondents viewed all five employer attractiveness values as large to great extent when looking at potential employers i.e., all five scales had means above 5.5 and below 6.0. From the findings/results, we can say that these FFA members in Generation Z expect all five values when looking at employer attractiveness. Businesses can address all five values by incorporating these values into their organization's culture, policies, and practices. More so, they may better engage Generation Z employees by fostering an environment that is consistent with their values. However, there were differences in the responses, which implies there are variations in how individuals see the values from their own distinct perspective i.e., at least one respondent had a mean scale score of 2 or lower for each of the five scales. Additionally, these FFA members in Gen. Z would be attracted to a workplace that meets the five values regardless of their gender, ethnicity/race, social-economic status, or year of graduation.

The Pew Research Center (Dimock, 2019) is the foremost agency in research on generations. It is beginning to gather data on the generation born after Gen Z, currently referred to as Gen Alpha. As members of Gen Alpha enter middle and high school, it will be important to conduct workplace attractiveness research on this group.

### **Recommendations**

Agricultural companies should be aware of the next generation of employees', Gen Z, workplace attractiveness factors/preferences so that they can recruit and retain an appropriate workforce. This study addressed one of the concerns of Singh and Dangmei (2016).

Generation Z employees may have different expectations for work than Millennials, Gen X, and Boomers (Gabriellova & Buchko, 2021; Schullery, 2013). With the findings from our study that respondents did not differ in the five values by demographics, we recommend agricultural companies base their work expectations for new Gen Z employees on the five values.

This study was of FFA members who had graduated high school. Although Alumni and Supporters and Forever Blue are open to all, it may be that our respondents were more active in FFA than the typical high school School-Based Agricultural Education student. Further research should be done to see if a relationship exists between level of involvement in FFA experiences in high school and how members of Gen Z view workplace attractiveness.

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## **Fraternity Leadership Learning Community: A Pilot Program**

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For agricultural leadership programs, leadership development of college students is one of the key objectives. Given that the foundation of the leadership courses within these programs is multidisciplinary, opportunities to expand student leadership development beyond agricultural leadership and education students are numerous. As such, this study seeks to explore student perceptions after completing a pilot program integrating Greek fraternity new member education within a previously established freshman-level interpersonal skills leadership course offered within an agricultural leadership program. The pilot program consisted of 76 new members from nine majors belonging to two Greek organizations, with each organization having its own section of the course. This descriptive study explores student perceptions of the course, as well as a self-assessment of perceived learning outcome achievement. Results indicate that students rated the course very favorably, and believed they achieved the learning outcomes for the course. Furthermore, the results of this study suggest that one potential opportunity for growing undergraduate leadership development options is to create co-curricular partnerships between agricultural leadership programs and undergraduate Greek fraternities and sororities.

### **Introduction**

Leadership education is rooted in agricultural leadership (Weeks & Weeks, 2020). However, leadership educators are not limited to agricultural sciences and contribute to leadership scholarship through multiple disciplines including education, business, management, and psychology (Stedman & Weeks, 2014). Agricultural leadership scholars often focus on preparing professionals within agricultural education with particular emphasis on classroom instruction, farm practices and mechanics, and extracurricular activities such as FFA (formerly Future Farmers of America) and the 4-H youth development organizations (4-H) (Talbert, et al., 2014). Despite differences in the areas of focus, the interest of leadership scholars and agricultural leadership scholars intersect in core principles and theories of leadership (Stedman & Weeks, 2014). Historically focused on developing leaders in agricultural sciences, now several academic programs in agricultural leadership aim to prepare future leaders across different fields (Rosch & Coers, 2013; Weeks & Weeks, 2020). One of the opportunities that allow agricultural leadership educators to expand their impact is the common reliance on leadership theories and models created across several disciplines such as psychology and management. Furthermore, the collaboration of faculty across disciplines provides unique learning opportunities to students from various educational fields (Weeks & Weeks, 2020).

One area of expansion for agricultural leadership programs is in extra and co-curricular leadership development. Specifically, studies suggest fraternities and sororities provide valuable professional leadership experience and promote citizenship behavior (Jelke, 2001). Furthermore, Martin et al. (2012) reported that students in fraternities and sororities demonstrated higher scores in a leadership assessment than unaffiliated students. Other studies report higher gains in leadership skills in students of Greek organizations compared to other students (Routon & Walker, 2016) and their positive role in shaping the communities through active engagement in

service projects (Porter, 2012). Greek organizations have a significant proportion in the US education system with a member base of 750,000 undergraduates and at least 9 million alumni (Routon & Walker, 2019).

In addition to extracurricular opportunities, formal undergraduate leadership programs have been particularly beneficial in growing leadership skills by positively influencing common values and citizenship behaviors (Dugan, 2006). Additionally, these programs have other leadership-related outcomes such as civic responsibility, learning leadership theories, multicultural sensitivity, and personal and societal values (Cress et al., 2001; McElravy et al., 2017).

While both the Greek system and undergraduate leadership programs have opportunities to positively impact student development, several challenges loom. Most importantly, declining undergraduate enrollment (Meyer, 2023) and a lack of trained faculty to teach leadership courses (Weeks et al., 2009). Considering the significance of co-curricular and extracurricular activities in building leadership among college students (Dugan, 2006), opportunities to create and expand co-curricular programs to promote leadership development provide one path to strategic advancement. In this paper, we explore student perceptions of a pilot program to integrate new member education within fraternities and a credit-bearing interpersonal leadership skills course offered within an agricultural leadership program.

### **Theoretical/Conceptual Framework**

The theoretical framework applied for leadership development within the interpersonal leadership skills course is the social change model (SCM) of college student leadership development (Astin, 1996). The course focuses on both personal and interpersonal dimensions of leadership and aims to develop leadership in college students based on their self-knowledge. Haber and Komives (2009) describe SCM as emphasizing seven core values at three different levels: individual (consciousness of self, congruence, commitment), group (collaboration, common purpose, controversy with civility), and community (citizenship). The course curriculum specifically engages students in individual development, while also helping build skills in collaboration through teamwork activities. Finally, the course requires students to engage in 20 hours of community service, thus emphasizing the “community” component of SCM.

### **Purpose**

The purpose of this pilot project is to explore student perceptions of a pilot program to integrate an interpersonal leadership skills course (offered by an agricultural leadership program) with new member programs within two Greek fraternities at a mid-Western public land-grant university. This descriptive survey study explores student perceptions of the course, as well as a self-assessment of perceived learning outcome achievement after completing the course.

### **Research Questions**

To help explore the impact of our pilot project, we identified two research questions:

Q1. How do new members evaluate the interpersonal leadership skills course, using standard institutional student evaluation questions?

Q2. Do students perceive that they achieved the learning outcomes for the course?

## **Methods**

The interpersonal leadership skills course was taught to 76 students in a face-to-face format in fall 2022. Undergraduate educators, associated with two different fraternities, which we identify as Sigma and Delta, instructed the two class sections, under the supervision of a senior professor from the same university. Student volunteers, who normally serve as new member educators within their respective Greek chapters, served as learning assistants. One core component of the course is a service-learning requirement, as students volunteer at non-profit agencies within the community to apply the course leadership concepts. In all aspects, the sections of the course for the fraternities were the same as sections taught by other instructors with one exception, the two fraternity sections also integrated their new member education curriculum within the course. For example, new members also had to learn about the history of their Greek organization. It is also worth noting how the fraternity sections integrated new member education programming within the course content. For example, all sections of the course include a module on personal values. The fraternity sections discussed their Greek fraternity values and encouraged students to integrate them within their own personal values.

Toward the end of the course, the students were asked to complete the standard online course evaluation survey. The course evaluation generally includes opportunities for students to reflect on different elements of the course and information about their participation in the course. We focused our data analysis on 10 items related to student learning. These items are evaluated by students using a 5-point scale (ranging from 5-strongly agree to 1-strongly disagree). Additionally, we added five customized questions to address our second research question. Specifically, we asked students to provide feedback about the degree to which the course helped them achieve five broad learning outcomes: effective communication, enhanced self-esteem, clarified values, realistic self-appraisal, and leadership development. The students rated these outcomes on a 5-point scale (5-Very high achievement, 4-High achievement, 3-Moderate achievement, 2-Low achievement, 1-No achievement).

The sample of the pilot study consisted of 76 undergraduate students out of which 67 were first-year students, 7 sophomore students, and 2 seniors attending four-year public research in a mid-Western University. The students were associated with different majors, including Business (37), Engineering (7), Education and Human Sciences (4), Arts and Science (10), Undeclared (11), Journalism and Mass Communication (4), Fine and performing arts (1), Agricultural and Natural Resources (1), and Architecture (1). Students represented two Greek fraternities: Sigma and Delta. Ten students out of 34 responded from Sigma, giving a response rate of around 30%, whereas 18 students responded out of 42 from Delta, giving a response rate of 43%. Overall, the response rate was 37%.

## **Findings**

Overall, for the general evaluation of the course, we report the 10 items used in all course evaluations at the institution. The question stem for the 10 items is: “Educational research has identified the elements in the below statements as being important to student learning. For each statement, please select your level of agreement regarding your learning experiences in this course.” The results demonstrate that students generally agree or strongly agree with each of the statements, as the mean scores ranged from 4.46 to 4.89 on a 5-point scale (see Table 1 for complete results).

**Table 1**

*Student Course Evaluations*

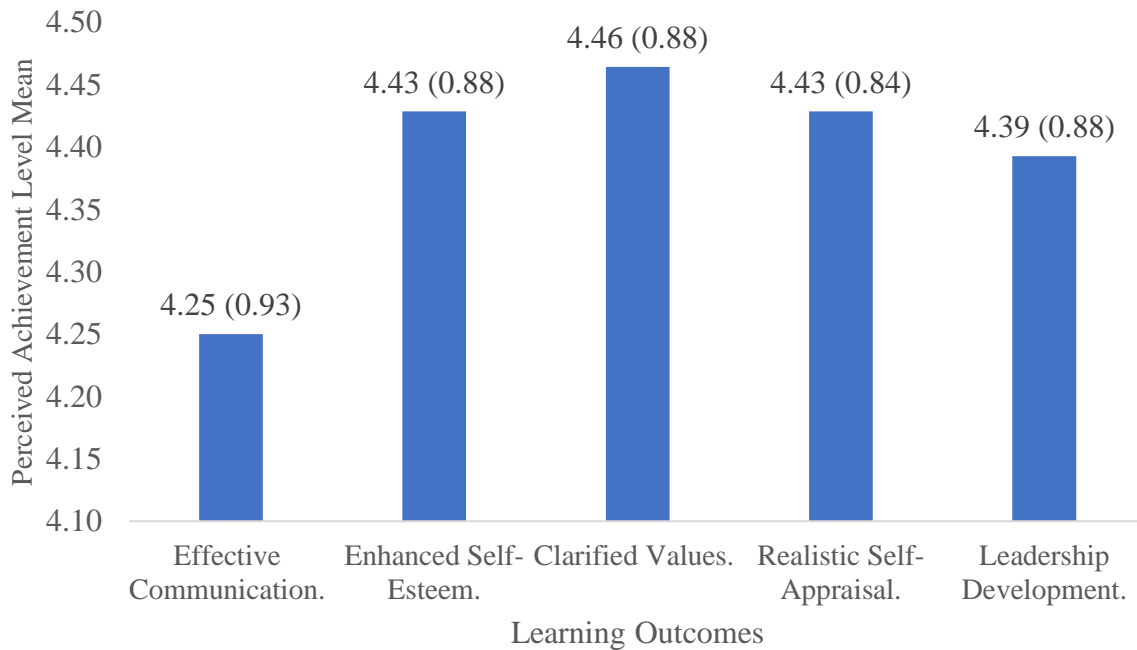
Evaluation Question	<i>M</i>	<i>SD</i>
I feel welcome and respected.	4.89	0.42
I understand course expectations and how my performance is evaluated.	4.82	0.48
I feel challenged to learn a lot in this course.	4.46	0.69
Course activities effectively promote my learning and interest in the subject.	4.68	0.61
The learning tools (e.g., course texts, notes, slides, videos, exams, projects, etc.) support my learning.	4.57	0.63
I am invited to be an active participant in my learning (either face-to-face or online).	4.75	0.52
I have opportunities to learn with and from other students in this course.	4.75	0.62
The feedback I receive on my work is useful to me for making changes and improvements.	4.75	0.52
I know where to go for help in this course if, and when, I need it.	4.75	0.52
I find communication with the instructor (e.g., office hours, email, Canvas, etc.) effectively supports my learning.	4.82	0.48

To explore the degree to which students perceived that they were able to meet the learning outcomes for the course, students responded to five items, with the following stem: “To what degree did this course help you achieve the following learning outcome.” The results indicate that students believed they had achieved all five learning outcomes, as scores ranged between high achievement and very high achievement. Complete results are provided in Figure 1 (standard deviations are listed in parentheses).



**Figure 1**

*Student Perceived Learning Outcome Achievement.*



### **Conclusions**

We studied student perception of an interpersonal leadership skills course integrated within two fraternity new member programs. Based on the student self-assessment, the students perceived that the course supported their learning. The students participating in the courses were primarily freshmen and from a broad range of colleges, suggesting that the course, although situated with an agricultural leadership program, had broad applicability.

### **Recommendations**

This project outline brings together a class-based education and extracurricular activities, where students perceive the experience positively, and demonstrate leadership learning gains. Future research should explore other components of the student experience, including comparative studies between fraternity sections and other sections of the course. Additionally, given that the fraternity serves as an additional environment for students to practice interpersonal leadership skills, an argument could also be made that students within the fraternities might have greater leadership learning gains than unaffiliated students. This would build from previous research reporting that students who participate in on-campus activities or in agri-business have stronger association with the leadership constructs (Schumacher & Swan, 1993).

### **Discussion/ Implications**

The pilot project provides a framework for integrating extracurricular and a credit-bearing course to create a co-curricular experience within an agricultural leadership program. The findings suggest that the students had positive experiences within the course and gained leadership skills. Implications include exploring collaborations between student affairs and agricultural leadership programs to promote leadership education across fraternities and sororities through classroom and experiential approaches.

Additionally, informal feedback from the fraternities has indicated that their new member retention rates were higher than what they normally expect, and the parents of new members saw the course as positively influencing their ability to support their child to join the fraternity. The fraternity alumni have indicated that they would like to further invest in the program. As such, the program is expanding, and eight chapters of Greek organizations are planning to participate. The current estimate is that an additional 216 students are in the program for fall 2023.

Limitations include low response rate, and thus generalizing to the entire population may not be appropriate. Furthermore, the limitation of conducting the pilot program within fraternities does not allow generalizing results for sororities, though the goal would be to expand the program to sororities as well. The results are also limited to student perceptions of leadership development, and more data sources, for example, collecting student work, could be valuable in providing more information about leadership skill development. However, given these initial results, there is confidence to continue the program, and to continue collecting data to determine program impact.

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# Technical Agriculture Content Courses Required for Undergraduate Degree Completion in Agricultural Education: A Historical Review

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## Introduction & Purpose

Today's vast agricultural complex provides challenges and opportunities for school-based agriculture educators (SBAE). Smith-Hughes recommended Agricultural Education be comprehensive in coverage, scientific in nature, and practical in impact and focus (National Research Council, 1988). Today, SBAE teaches about agriculture, food and natural resources, while incorporating science, math, communications, leadership, management and technology (NAAE, 2023). Additionally, SBAE is expected to deliver curriculum and co-curriculum across a wide variety of agricultural content areas.

Teachers must possess a deep understanding of subject matter to effectively teach content (Bransford et al., 2000). In 1953, 35% of teacher preparation programs required over 60 hours of technical agricultural content (Torres et al., 2010). Cruickshank (1996) recommended one-third of teacher preparation curriculum be technical content, with an additional third of the coursework in integrative studies incorporating professional coursework with technical agriculture content. Assessments and student achievement in post-secondary courses may not indicate a level of performance sought by communities and employers ever increasing demands (Edwards, 2004).

A review of all technical agriculture course requirements and course topics to identify trends in content preparation of SBAE instructors over time could inform key stakeholders of

SBAE about current requirements in technical agricultural content and identify potential deficits and needs for in-service teachers.

This study's purpose was to explore the course credit requirements of agricultural education teacher preparation programs from 1980 to 2020 regarding technical agricultural courses. Nineteen-eighty was chosen as a decade of great change in agricultural and vocational education overall. Both the 1983 report *A Nation at Risk* (Bell, 1983) and the Carl D. Perkins Act (Carl D. Perkins Vocational Education Act, 1984), called for renewed emphasis on academic course-taking by secondary school students and for career and technical education assisting to achieve that aim.

Therefore, the research question guiding this study was What was the trend in course requirements related to technical agriculture courses for completion of agricultural education undergraduate degrees across ten agricultural education teacher preparation institutions over time?

## Methods

Historical research methods were used in the study. Data were collected (McDowell, 2002) by accessing online databases and search engines, exchanging personal communications, and reviewing institutional libraries' resources. The sample for this study was identified by using systematic sampling of institutions listed on the AAAE website. The three AAAE regions were used to frame the sub-groups of the study: 1) North-Central, 2) Southern, and 3) Western. Each sub-group had all institutions alphabetized; such were numbered based on alphabetical order and a random number generator was used to select three institutions from each region. Oklahoma State University (OSU) was added to the study due to the interests of the researching institution. The ten institutions identified for this study were South Dakota State University (SDSU), West Virginia University (WVU), and the University of Missouri (UM) for the North Central region. Virginia Tech (VT), University of Florida (UF) and Auburn University (AU) were identified for the Southern Region. Washington State University (WSU), Utah State University (USU), Texas A&M University (TAMU), and Oklahoma State University (OSU) were identified for the Western Region.

Primary sources (McDowell, 2002) included university records of degree completion requirements, or course-taking requirements, as set forth by the respective academic departments and their institutions. The key terms and phrases used to aid in finding the study's sources via online searches were 1) agricultural sciences degree requirements, 2) agricultural education degree requirements, 3) historical university degree sheets, and 4) historical university course catalogs. Searching multiple terms allowed for a reduced possibility of *presentism* occurring if considering historical versus mere current-day naming conventions (Johnson & Christensen, 2012). Limitations of this study included unobtainable or incomplete institutional records in a few cases. A database collection detailing all documents received, identified, and examined for accuracy and authenticity was created to organize findings to answer the study's research questions (McDowell, 2002), i.e., internal and external criticisms of the data were conducted (Johnson & Christensen, 2012).

## Findings

Online searches using the ten universities' internal search engines and their respective websites yielded archived course catalogs and related information about undergraduate degree completion requirements. The catalogs offered descriptions of course titles, course topics, and requirements for undergraduate degrees in agricultural education. Results displayed in Table 1 show an analysis by five-academic-year increments; technical agriculture credit hour requirements are displayed as the eight National AFNR content pathways (The Council, 2023), including 1) Animal Science (AS), 2) Agriculture Power, Structures & Technology (AM), 3) Plant Sciences (PS), 4) Natural Resources and Environmental sciences (two pathways combined, NRE/Ev.), 5) Agribusiness (AB), 6) Biosystems, and 7) Food Science and Preservation (FS). Electives and total credit hours required for graduation were also identified. Hyphenated credit hours indicate a range of course credit hour requirements based upon different offerings/requirements indicated in that academic year. For institutions which offered multiple degrees in agricultural education, an average was calculated.

**Table 1**

*Course Credit Hour Requirements in Technical Agriculture Courses for Undergraduate Degree Completion in Agricultural Education from 1980 to 2020 at Ten Agricultural Education Teacher Preparation Institutions*

Year	Course Content Area	SDSU	WVU	UM	VT	UF	AU	WSU	USU	TAMU	OSU
1980	AS	15	3	11	Unsp.	5*	**	3-6	17-19*	9	**
	APT	12	0	10	Unsp.	9*		8-22	12-21*	8	
	PS	12	6	10	Unsp.	13*		13-20	14-21*	10	
	NR/Ev	0	0	0	Unsp.	5*		3-15	3*	4	
	AB	10	3	11	Unsp.	5*		3-12	6-35*	6	
	BioS	0	0	0	Unsp.	0*		0	0*	0	
	FS	0	0	0	Unsp.	0*		0	0*	0	
	Elec.	Unp.	68	7-18	Unsp.	18*		10-18	21-51*	15	
Total	136	136	128	190*	184*		120	186*	132		
1985	AS	15	3	11	Unsp.	4	**	6	17-19*	9	**
	APT	12	0	10	Unsp.	6		18	12-21*	8	
	PS	12	6	10	Unsp.	10		18	14-21*	10	
	NRE/Ev.	0	0	0	Unsp.	3		6	3*	4	
	AB	10	3	11	Unsp.	4		9	6-35*	6	
	BioS	0	0	0	Unsp.	0		0	0*	0	
	FS	0	0	0	Unsp.	0		0	0*	0	
	Elec.	Unsp.	68	7-18	Unsp.	9		11	21-51*	15	
Total	136	136	128	190*	128		130	186*	132		
1990	AS	6-12	3	9	Unsp.	4	**	6	17-19*	9	**
	APT	13	0(0)	10	Unsp.	3		18	12-21*	8	
	PS	5	6	12	Unsp.	14		15	14-21*	7	

	NRE/Ev.	0-6	0(0)	0	Unsp.	3	6	3*	0		
	AB	7	3	11	Unsp.	4	12	6-35*	9		
	BioS	0	0	0	Unsp.	0	0	0*	0		
	FS	0	0	0	Unsp.	0	0	0*	0		
	Elec.	Unsp.	66	3-7	Unsp.	9	11	21-51*	19-21		
	Total	129	136	128	190*	128	130	186*	132		
1995	AS	9	3	8	Unsp.	4	**	3	0*	9	**
	APT	10	0	7	Unsp.	3		6	20*	8	
	PS	9	6	11	Unsp.	15		16	17*	7	
	NRE/Ev.	2	0	0	Unsp.	6		0	5*	0	
	AB	4	3	11	Unsp.	4		6	6*	9	
	BioS	0	0	0	Unsp.	0		0	0*	0	
	FS	0	0	0	Unsp.	3		0	0*	0	
	Elec.	9	66	8	Unsp.	5		15	Unsp.	17-19	
	Total	128	136	128	130	128		134	186*	132	
2000	AS	9	4	9	3	4	4	3	3	9	**
	APT	10	5-8	6	9	3	6	6	3	9	
	PS	9	8	12	9	14	15	16	3	7	
	NRE/Ev.	2	0	0	3	3	0	0	Unsp.	0	
	AB	4	6	6	6	4	6	6	Unsp.	9	
	BioS	0	0	0	0	0	0	0	Unsp.	0	
	FS	0	0	0	0	4	0	0	Unsp.	0	
	Elec.	7	62-65	15	Unsp.	19	5	15	50	16-18	
	Total	128	136	128	130	120	120	134	120	132	
2005	AS	9	4	6	3	1	4-7	3	4-7	10	4-7
	APT	14	5-8	6	9	0	6	9	5-23	10	5
	PS	9	8	6	9	7	11	16	7-28	9	10
	NRE/Ev.	3	0	3	3	3	5-8	0	0-21	8	3
	AB	4	9	3	6	3	3	6	0-9	6	4
	BioS	0	0	0	0	0	0	0	0	0	0
	FS	0	0	3	0	0	0	0	0	0	0-3
	Elec.	5	59-62	12	Unsp.	18	12	18	Unsp.	11-12	19
	Total	128	136	128	120	120	125	137	120	120	124
2010	AS	10	4	6	3	4	4-7	3	4-10	10	4
	APT	8	3	6	6	3	6	15	5-26	10	5
	PS	6	8	6	6	7	11	9	4-31	9	10
	NRE/Ev.	3	0	3	3	3	5-8	0	0-24	8	3
	AB	4	9	3	6	7	3	3	0-6	6	4
	BioS	0	0	0	0	0	0	0	0	0	0
	FS	0	0	3	0	0	0	0	0	0	3
	Elec.	5	64	15	Unsp.	27	12	9	Unsp.	9-10	19
	Total	128	136	128	120	120	125	127	120	120	124
2015	AS	13	4	5	Unsp.	4	4	3	7	10	4
	APT	5	6	6	Unsp.	3	6	12	9	10	5
	PS	6	8	10	Unsp.	7	11	9	8	9	10
	NRE/Ev.	3	0	0	Unsp.	3	6	0	3	0	3



	AB	4	9	6	Unsp.	7	3	3	3	6	3
	BioS	0	0	0	Unsp.	0	0	0	0	0	0
	FS	0	0	0	Unsp.	0	0	0	0	0	3
	Elec.	6-9	64	18	Unsp.	18	12	12	11	14	19
	Total	120	136	120	120	120	129	129	120	120	124
2020	AS	7-13	4	6-8	0	4	4	3	9	10	4
	APT	4	8	6	7	3	6	9	6	4	5
	PS	9	8	10	0	7	11	9	14	9	10
	NRE/Ev.	3	0	0	0	3	3	0	3	0	3
	AB	4-7	9	6	0	7	3	3	0	6	3
	BioS	0	0	0	0	0	0	0	0	0	0
	FS	0-3	0	0	0	0	0	0	3	0	3
	Elec.	Unsp.	27	18	30	18	12	12	9	16	17
	Total	120	120	120	120	120	123	125	120	120	120

*Note.* <sup>a</sup>indicates that the institution participated in a four-quarter system. <sup>\*\*</sup>indicates that course credit hour requirements were either not provided or found. Unsp. indicates information was either unspecified or not stated in the data.

From 1980 to 2020, the average total course credit hours in technical agriculture content courses declined. In 1980, the average course credit hours across all content pathways, including electives, was 8.357 credit hours. However, in 2020 the average course credit hours across all content pathways, including electives, was 4.913 credit hours. Biosystems was found to have no required course credit hours for degree completion in agricultural education. This decline in technical course credit hours aligns with previous studies associated with specific agricultural content areas (Albritton & Roberts, 2020; Saucier et al., 2012).

### **Conclusions, Implications, & Recommendations**

The purpose of this study was to explore the course requirements at agricultural education teacher preparation institutions from 1980 to 2020 regarding technical agriculture content courses. The average number of course credit hours in agricultural mechanics required for completion of degrees in agricultural education, teacher education had declined from 1980 to 2020, from an average of 8.357 course credit hour requirements in 1980, to an average of 4.913 course credit hours required for degree completion in 2020. Total credit hours required for degree completion in agricultural education had also lessened from an average of 151.5 to 120.8 total credit hours from 1980 to 2020. By the year 2000, all ten institutions operated on a three-semester academic year. This change in academic calendar year operations could have been due to legislative changes to federal student loans and funding for different programs over time.

It can be concluded that, over time, university teacher preparation programs began implementing and requiring additional courses outside of the agricultural specific content courses. This change in course content focus could be due to the increased pressure from federal government legislation such as the No Child Left Behind Act (H.R. 1, 2001), which put an increased emphasis on student testing and teaching core educational courses in all aspects of non-core classes. More needs to be understood about the total number of courses, the course

topics and the changes made to the SBAE teacher preparation programs over this timeline. As courses at different university programs can have a range of credit hours given, it is important to look at the total number of courses across university programs to give a more accurate depiction of the difference in pre-service preparation programs. It is recommended that the course topics and the changes made to the specific course topics be analyzed to identify potential patterns across programs. This would also allow for potential analysis to identify if a correlation exists between the identified teacher technical skill needs in agricultural content pathways (Albritton & Roberts, 2020; Blackburn et al., 2015; Hainline & Wells, 2019; Peake et al., 2007; Solomonson et al., 2022).

When accounting for only the required courses in specific agriculture content courses, SDSU (39 course credit hours) was the closest to Cruickshank's (1996) recommendation of having one-third of all post-secondary coursework be related to the specific field in which pre-service teachers are preparing to teach. With electives not being specified in many instances, it would be recommended that university faculty work closely with pre-service teachers to enroll them into agriculture content courses in which they may have little experience with the content knowledge and skills. Thus, allowing the pre-service teachers to increase their breadth of knowledge (Bransford et al., 2000) within the scope of agriculture.

It is also recommended that comparisons between land-grant and non-land-grant institutions be compared to ascertain the emphasis placed on technical agricultural content courses for degree completion in agricultural education. As certain land-grant and non-land grant universities contain SBAE pre-service preparation programs, ascertaining the similarities and differences between the two types of institutions may allow drawing comparisons between self-efficacy in agricultural content, motivation to teach agricultural content, and overall preservice preparation comparisons on like or similar courses.

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# **Exploring Social Media Use of Agricultural Commodity Cooperatives in Ohio**

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## **Abstract**

A strong relationship with members is crucial to the success of an agricultural cooperative. As digital communication tools become more popular, it is important to understand how cooperatives use these tools to communicate with members. This study found that Ohio's agricultural cooperatives are committed to integrating social media into their communication strategy, but lack consistency on many platforms. Followers have shown a willingness to engage with cooperatives on social media, predominantly through follows, likes, and shares.

## **Introduction/Theoretical Framework**

Agricultural cooperatives in the United States represent a large network of farmers, with approximately two million farmers having ownership in one of 2,100 agricultural cooperatives nationwide (NCBA, 2021). These cooperatives provide marketing, a variety of service, and supply benefits to their members (NCBA, 2021). As farmer-members are an essential element of cooperative operations, effective communication is crucial to ensuring members' needs are being met (Baseman, 2012).

Organizations work to create connections that address common issues and formulate partnerships through both good and stressful times. Communication can assist organizations with the construction and maintenance of key relationships with their clientele. In Organizational-Public Relations Theory, these relationships create a strong bond that benefits both the organization and the public (Ledingham & Bruning, 1998). Organizational communication literature indicates organizational failure is often due to non-existent, or poorly executed, communication strategies (Baker, 2007). As audiences increasingly seek two-way communication tools, the use of social media platforms have become more important to organizational communication strategy (Berthron et al., 2012).

A strong relationship with cooperative members is crucial to the success of cooperative organizations, which are funded by their farmer-members. Communication is essential to ensuring cooperatives are working in the interests of their members (Peng et al., 2018). Faults in communication could lead to hindered relationships, thus hurting the organization's ability to perform effectively (Georges & Caleman, 2021).

Some studies have investigated cooperatives' communication efforts and the strategies they utilize when communicating with their members (Butler et al., 2023; Georges & Caleman, 2021). Georges and Caleman (2021) found that cooperatives have demonstrated preference for traditional and personal means of communication, such as face-to-face interactions, printed newsletters, or member meetings. In transitioning to digital communication tools, Georges and Caleman (2021) argued cooperatives must understand the communication desires of their members and establish the platforms that will reach multiple audiences.

Social media are often used to foster relationships between businesses and their clientele (Kim & Ko, 2012). Dolan et al. (2019) outlined a framework for understanding user engagement as the user moves from passive consumption of content, to actively contributing through likes and shares, before actively creating comments. The content type may influence how users engage with a platform (Dolan et al., 2019).

One study found that in Texas, “agricultural commodity cooperatives...have been slow to adopt and integrate social media and online communication channels into their communication strategies” (Butler et al., 2023, p. 11). However, Facebook was the most popular platform used by agricultural cooperatives, indicating a possible member preference (Butler et al., 2023). There is need for research on other agricultural cooperatives’ communication strategies (Butler et al., 2023; Georges & Caleman, 2021).

### **Purpose and Research Questions**

The purpose of this study was to conduct a communication audit to evaluate the communication strategies used by Ohio’s grain cooperatives via their social media platforms. The research was guided by the following research questions:

RQ1: What social media platforms have cooperatives established?

RQ2: What is the content and frequency of the established social media platforms?

RQ3: What is the follower engagement on each social media platform?

### **Methods/Procedures**

We conducted a communication audit to explore the social media platforms utilized by the cooperatives in this study. A communications audit is used to assess an organization’s internal or external communication activities (Coffman, 2004) and is descriptive in nature. Cooperatives were purposively selected for inclusion in this study based on their status as grain cooperatives in Ohio with membership in the Ohio AgriBusiness Association. The seven largest grain cooperatives by membership were selected for the audit. Each cooperative has multiple office locations across the northern, western, and central regions of Ohio.

To conduct the communication audit and organize descriptive data, the researchers followed the protocol developed by Butler et al. (2023). Cooperative accounts on Facebook, Twitter, Instagram, LinkedIn, and YouTube were analyzed. These platforms were selected due to their status as the top five most popular platforms used by businesses (Statista, 2022). After the cooperatives were identified from the list provided by the Ohio AgriBusiness Association, we reviewed cooperative websites to determine what social media accounts each cooperative had established. As a secondary check, we conducted a web search to uncover any platforms that were not directly linked to cooperatives’ websites.

We evaluated the most recent 30 posts published on each social media platform. One member of the research team reviewed and organized the content. Upon completion of the analysis, the remaining team members were debriefed on the process and results. The posts were

assessed for content type, frequency of posting, and follower engagement. For each platform, posts were sorted into categories based on content which included general information about the cooperative, commodity market information, or posts unrelated to the cooperative. When the posts represented a mix of categories, the accounts were assigned a code representing the combination of categories. The number of followers on each social media account, total likes, shares, and comments for the last 30 posts were recorded. Accounts with less than 30 total posts were also recorded.

## Findings

### RQ1: What social media platforms have cooperatives established?

Of the cooperatives analyzed in this study, all ( $n = 7$ , 100%) had LinkedIn accounts, and six ( $n = 6$ , 85.7%) had Facebook, Twitter, and YouTube accounts. Three cooperatives ( $n = 3$ , 42.9%) had Instagram accounts. Only one cooperative had established an account for every social media platform analyzed.

**Table 1**

*Social media accounts established by cooperatives (N = 7)*

Platform	<i>f</i>	<i>f</i> percentage
LinkedIn	7	100.00%
Facebook	6	85.71%
Twitter	6	85.71%
YouTube	6	85.71%
Instagram	3	42.85%

### RQ2: What is the content and frequency of the established social media platforms?

A combination of three categories: marketing and advertising, general cooperative information, and personal use were most commonly presented content types within the most recent 30 posts on Facebook ( $f = 6$ ), Twitter ( $f = 4$ ), Instagram ( $f = 3$ ), and LinkedIn ( $f = 3$ ), posts. YouTube videos most commonly represented a combination of marketing and advertising ( $f = 5$ ), and general cooperative information in the 30 most recent videos. Post frequency ranged across all platforms (Table 2), though Facebook was the most consistent, with all cooperatives with an account posting at least once per week. YouTube, on the other hand, was the least consistent platform, as most cooperatives ( $f = 5$ ) had not posted a video in the last month or longer.

**Table 2**

*Type of content and post frequency of cooperatives' established social media accounts*

Content type	Facebook	Twitter	Instagram	LinkedIn	YouTube
	( $n = 6$ )	( $n = 6$ )	( $n = 3$ )	( $n = 7$ )	( $n = 6$ )
	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>
Marketing/advertising, general info, and personal use	6	4	3	3	1
Marketing/advertising and general info	-	2	-	-	5



General info only	-	-	-	2	-
No content	-	-	-	2	-
Post frequency	Facebook ( <i>n</i> = 6)	Twitter ( <i>n</i> = 6)	Instagram ( <i>n</i> = 3)	LinkedIn ( <i>n</i> = 7)	YouTube ( <i>n</i> = 6)
	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>
No post in 6+ months	-	1	1	2	2
No post in 4 – 6 months	-	-	-	-	1
No post in 1 – 3 months	-	2	-	2	2
Posts at least once a week	1	-	-	-	1
Posts at least 2 – 3 times per week	2	1	1	2	-
Posts at least once a day	3	2	1	1	-

### RQ3: What is the follower engagement on each social media platform?

Follower engagement was determined by the number of followers for each established account, and likes, shares, and comments on the 30 most recent posts (Table 3). Facebook had the largest number of followers, averaging 2935 followers per page. Twitter had the largest engagement through likes ( $M = 41$ ,  $range = 0-201$ ) and shares ( $M = 5$ ,  $range = 0-14$ ), followed by Facebook likes ( $M = 17$ ,  $range = 3-22$ ) and shares ( $M = 3$ ,  $range = 1-5$ ). LinkedIn had the lowest engagement, averaging four likes per post, with no shares or comments. Across all platforms, comments were the least used form of engagement, with most posts having no comments, and a few having one or two. YouTube engagement, represented through video views, ranged from 71 to 325 views per video, with an average of 114 views per video.

**Table 3**

*Social media engagement through average followers, likes, shares, comments, and views*

Platform	Followers	Likes		Shares		Comments		Views	
	<i>M</i>	<i>M</i>	<i>Range</i>	<i>M</i>	<i>Range</i>	<i>M</i>	<i>Range</i>	<i>M</i>	<i>Range</i>
Facebook	2935	17	3-22	3	1-5	1	0-1	-	-
Twitter	348	41	0-201	5	0-14	1	0-2	-	-
Instagram	439	13	10-17	0	0	0	0	-	-
LinkedIn	497	4	0-8	0	0	0	0	-	-
YouTube	91	-	-	-	-	-	-	114	71-325

## Conclusions and Recommendations

The relationship between an agricultural cooperative and its farmer-members is critical to the success of the organization (Baseman, 2012). This study sought to explore this relationship by evaluating cooperative social media accounts and follower engagement. As these cooperatives were purposively selected, the results are only generalizable to the cooperatives included. The cooperatives included in this sample appear to demonstrate a commitment to integrating social media in their communication strategy. Similar to the Texas cooperatives (Butler et al., 2023), Facebook was the platform most consistently used by Ohio cooperatives as well. As Facebook is the world's most popular social media platform for business and personal use,

(Statista, 2023), it is likely this consistency stems from cooperatives' familiarity and comfort with the platform.

All cooperatives had established a LinkedIn account, but it was used less consistently suggesting these cooperatives recognize the importance of establishing a LinkedIn account but have not yet implemented it into their communication strategy. YouTube is the second most popular social media platform (Statista, 2023), but it was the least consistently used. As a video-based platform, it is possible that cooperatives do not have the resources, to produce videos for this platform.

Organizational communication theory stresses the importance of public engagement with organizations' communication platforms (Berthron et al., 2012). Followers of these cooperatives have shown a willingness to move beyond passive content consumption to actively contribute to posted content, predominantly through likes, but with a decent inclination to share as well. However, very few have moved to the active creation stage by commenting on posts (Dolan et al., 2019). This suggests that while followers are willing to engage, cooperatives could be doing more to increase engagement with their posts. A strong communication strategy is critical to a cooperative, to ensure its members' needs are being met. This study indicates that Ohio's grain cooperatives are working to ensure their members stay up-to-date on cooperative operations, as well as other issues that may impact how their farmer-members conduct business. However, these results also indicate that, while cooperatives seem to have strong consistency on some platforms, such as Facebook, there are other platforms, like LinkedIn, where communication strategy is lacking.

This communication audit delves into cooperatives' enacted communication strategy; it does not provide an understanding of the cooperatives' perspectives of their strategy and its results. Future research should explore how cooperatives view their communication strategy – whether they are satisfied with the engagement levels or if they seek to improve their social media engagement. Additionally, future research should focus on cooperatives' perspectives on the various platforms to better understand the variance in post frequency and engagement.

As Dolan et al. (2019) noted, type of content may influence how users engage with a social media platform. Future research should more specifically determine the type of content posted and the engagement each type receives. This research could also be extended beyond grain cooperatives, to explore the social media strategy of other agribusinesses in Ohio. Echoing the call by Butler et al. (2023), this study should also be replicated in other states, to understand the impact of cooperative communication strategies across the country.

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# **SBAE Student Perceptions of Motivation through the Lens of Situated-Expectancy Value Theory**

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## **Introduction**

Many factors such as student or teacher age, course content, modalities of learning, and student interest, can interact to influence student motivation (Patrick, 2023; Schunk et al., 2019). Teachers must be capable of assessing and impacting motivation within the learning environment (Fortier, 1995; Schunk et al., 2019). One theory that has been historically known to explore motivation within learning environments is Situated Expectancy-Value Theory (SEVT). SEVT formalizes the existence of many structures driving decision making for students in the learning environment (Eccles & Wigfield, 2020). Research in this area has formalized that much of the task, utility, attainment, and intrinsic values students hold change from situation to situation (Eccles & Wigfield, 2020). However, SEVT is unique in that the learning environment is taken into consideration within the theory; it is understood that motivation will shift with different learning environments and over time (Eccles & Wigfield, 2020, Schunk et al., 2019). The tenets of SEVT explored through this study include expectancy for success, relative cost, utility value, and achievement-related choices and performance. Expectancy for success is explained to be the beliefs held by students that they will perform well in an environment (Eccles & Wigfield, 2020). Relative cost refers to the time, effort, and other resources utilized to perform well or prepare for engagement in an activity (Eccles & Wigfield, 2020). Utility value is the value and emphasis of the content from the learning environment based on its perceived importance for the future (Eccles & Wigfield, 2020). Achievement-related choices and performance is explained as the types of choices and performances provided by the student based on their success in the learning environment (Eccles & Wigfield, 2020). Each of these aspects of student motivation can be applied to any learning environment; therefore, they are able to be utilized within Career-Technical Education (CTE), including School-Based Agricultural Education (SBAE).

SBAE is one such learning environment and has unique aspects that influence motivation including hands-on learning, elective enrollment, student-driven activities, and mentorship (Anderson, 2013; Baker & Robinson, 2017; Bowling, 2017; Curry, 2017). This study will build on literature about coaching methods (Bowling, 2017; Curry, 2017), selection of activities (Baker & Robinson, 2017; Knobloch et al., 2016), and student enrollment (Anderson, 2013) to gain insight in SBAE student motivation. This prior research has encouraged future research to continue to conduct research utilizing applicable motivation theories, learn more about student perspectives about their motivation (Bowling, 2017, Bowling & Ball, 2020; Baker & Robinson, 2017, Curry, 2017; Knobloch et al., 2017). Currently, SEVT has not been utilized in SBAE research and this study sought to learn about student motivation from the perspective of SBAE students.

## **Theoretical Framework**

SEVT was used to frame this study. SEVT seeks to explore the characteristics driving student motivation. The tenets of expectancy for success (ES), utility value (UV), and relative cost (RC) work together to impact the achievement-related choices and performance (ARCP). ES embodies beliefs about potential for success (Eccles & Wigfield, 2020). UV is the value of the knowledge learned in a student's future (Eccles & Wigfield, 2020). RC is the set of resources a learner must give up to engage in the environment (Eccles & Wigfield, 2020). ARCP embodies the skills mastered, recognitions earned, or goals met during their experiences (Eccles & Wigfield, 2020). The SEVT model posits that age and length of time in a learning environment are impactful for student motivation (Eccles & Wigfield, 2020).

## **Purpose and Objectives**

The purpose of this study was to explain the relationship between student age and years in SBAE and SEVT tenets on the students' ARCP within SBAE. This study was guided by the following objectives:

1. Describe the perceptions SBAE students hold about their ES, UV, RC and ARCP.
2. Determine if student age, years in SBAE, and tenets of SEVT explain a significant proportion of variance in ARCP.

## **Methods**

This explanatory, relational quantitative study utilized a target population of Ohio SBAE students enrolled in single-teacher programs with 50-90 students. We purposively sampled ten programs and invited all students to participate. Ohio Department of Education staff helped identify the programs meeting these requirements and actively engaged in the three-circle model. The sample included the 774 students at the programs. The completed sample included 70 students, 40 (57.1%) female and 30 (42.9%) males. The average age was 16.8 years ( $SD = 1.28$ ). Class distribution included 15 (21.4%) freshman, 10 (14.3%) sophomores, 14 (20%) juniors, and 31 (44.3%) seniors. The students averaged 2.6 years ( $SD = 1.18$ ) in SBAE. FFA membership length included 18 first year (25.7%), 15 (21.4%) second year, 14 (20%) third year, and 23 (32.9%) fourth year members.

We utilized the Expectancy-Value-Cost Survey provided by Barron et al. (2017). The questionnaire was designed to collect data about ES, UV, and RC. The survey was modified to examine all aspects of the SBAE three-circle model, goals achieved, recognition earned, class grades, and GPA. The survey met the thresholds required for reliability and was validated by a panel of experts (Barron et al., 2017; Nunnally, 1978). A post-hoc analysis determined the sample's reliability estimates exceeded the acceptable Cronbach's alpha value thresholds (Nunnally, 1978).

We mailed invitations and reminder postcards containing the questionnaire link to all sampled programs. SBAE teachers were asked to distribute invitations and reminders weekly for four weeks (Dillman et al., 2016). We received 88 responses with a complete sample of 70 responses with a 9% response rate. This response rate was impacted due to IRB processes

preventing us from accessing each program to collect data in-person. Youth response rates tend to be lower due to the complex process of gaining parent consent (Lenhart, 2013).

Nonresponse error was addressed by sampling 14% ( $n = 10$ ) of the early and late responders and calculating independent samples  $t$ -tests to ensure these respondents were not statistically different in their responses to the Likert scales (Field, 2019). Data were analyzed using descriptive statistics for objective one, using real limits for analysis (Fife-Schaw, 2006). Objective two involved conducting hierarchical regressions. The dependent variable was the ARCP, operationalized by the percentage of accomplished goals. The independent variables in each model were calculated in two levels; the first included the SEVT tenets, the second added age and years of SBAE. All statistical assumptions were analyzed and upheld (Field, 2019).

### **Findings**

Objective one sought to describe the perceptions held by students about their ES, UV, RC and ARCP in SBAE, with results in Table 1. We found students agreed ( $M = 5.40$ ,  $SD = 0.52$ ) they could be successful in their class, SAE ( $M = 4.99$ ,  $SD = 0.76$ ), and FFA ( $M = 5.39$ ,  $SD = 0.71$ ). Students also agreed their class ( $M = 5.46$ ,  $SD = 0.61$ ), SAE ( $M = 4.83$ ,  $SD = 0.96$ ) and FFA activities ( $M = 5.37$ ,  $SD = 0.79$ ) held UV. In addition, students slightly disagreed that there was an RC for their class ( $M = 2.59$ ,  $SD = 2.05$ ), SAE ( $M = 2.90$ ,  $SD = 2.07$ ), and FFA activities ( $M = 3.05$ ,  $SD = 1.29$ ).

Related to ARCP, students reported to have met 84.30% of their goals in class, 70.40% in SAE, and 76.70% in their FFA activities. Most students (84.30%;  $n = 59$ ), stated they were earning an A (91-100%) in class and 91.4% ( $n = 64$ ) stated they were earning a GPA higher than 3.1. Most of the student recognition and awards were earned at the local level, with 22.9% ( $n = 16$ ) earned recognition for their SAE, 52.80% ( $n = 37$ ) earned recognition for their FFA leadership, and 72.80% ( $n = 51$ ) earned recognition for their FFA competition activities.

**Table 1***Descriptive Analysis of Students' Perceived SEVT Tenets (n = 70)*

SEVT Tenet	SBAE Area	<i>M</i>	<i>SD</i>	Range
Expectancy for Success	Classroom	5.40	0.52	4.33-6.00
	SAE	4.99	0.77	1.67-6.00
	FFA	5.30	0.71	2.00-6.00
	Overall	5.23	0.54	3.56-6.00
Utility Value	Classroom	5.46	0.61	3.67-6.00
	SAE	4.84	0.96	1.00-6.00
	FFA	5.37	0.78	2.00-6.00
	Overall	5.22	0.63	3.44-6.00
Relative Cost	Classroom	2.59	1.05	1.00-5.75
	SAE	2.90	1.08	1.00-5.25
	FFA	3.05	1.29	1.00-6.00
	Overall	2.85	0.94	1.00-4.83
ARCP	Classroom	8.43	1.78	1.00-10.00
	SAE	7.04	2.29	3.00-10.00
	FFA	7.67	2.13	1.00-10.00
	Overall	7.71	1.63	4.00-10.00

Hierarchical multiple linear regression (HMLR) was calculated to regress classroom goals achieved on the SEVT tenets in Model 1 with Model 2 adding age and years in SBAE. Within Model 1 utility value was a significant predictor ( $t_{70} = 2.82, p = .006$ ) accounting for approximately 26% of the variance in ARCP ( $R^2_{adj} = 0.26, F = 9.06, p < .001$ ). Within Model 2, the combination of the SEVT tenets, age, and years in SBAE accounted for approximately 26% of the variance in ARCP ( $R^2_{adj} = 0.26, F = 5.76, p < .001$ ). Therefore, the overall model change was not significant.

**Table 2***HLMR Predicting Classroom ARCP (n = 70)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
(Constant)	0.46	2.38		-3.91	4.67	
Exp. For Success	0.42	0.44	0.12	0.46	0.44	0.14
Utility Value	1.15*	0.41	0.39	1.20*	.41	0.41
Relative Cost	-0.21	0.20	-0.13	-0.21	0.20	-0.13
Age				0.28	0.24	0.20
Years in SBAE				-0.33	0.25	-0.22
Adj. R <sup>2</sup>		0.26			0.26	
R <sup>2</sup> Change		0.028			0.20	
<i>F</i>		9.06 (219.43)			5.75 (219.43)	

\*  $p < .05$ 

An HLMR was calculated to regress SAE goals achieved on the SEVT tenets in Model 1; age and years in SBAE were added to Model 2. Model 1 was not significant ( $R^2_{adj} = -0.02$ ,  $F = 0.63$ ,  $p = .60$ ). The non-significant variables included success expectancy ( $t_{70} = -0.32$ ,  $p = .75$ ), utility value ( $t_{70} = 0.62$ ,  $p = .54$ ), and relative cost ( $t_{70} = -0.87$ ,  $p = .39$ ). Within Model 2 the linear combination of the SEVT tenets, age, and years in SBAE accounted for approximately 16% of the variance ( $R^2_{adj} = 0.16$ ,  $F = 3.71$ ,  $p = .005$ ). Age was a significant predictor ( $t_{70} = 2.80$ ,  $p = 0.007$ ). The analysis indicated as age increased by one year within the SAE goals achieved increased by 5% (95% CI: 0.26, 1.55;  $\beta = 0.50$ ) if all other variables are held constant. The remaining variable of years in SBAE ( $t_{70} = -0.40$ ,  $p = .69$ ) within Model 2 was not significant.



**Table 3***HLMR Predicting SAE ARCP (n = 70)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
(Constant)	7.27	2.46		-8.90	5.49	
Exp. For Success	-0.20	0.61	-0.07	-0.05	0.56	-0.02
Utility Value	0.31	0.50	0.13	0.41	0.46	0.17
Relative Cost	-0.25	0.29	-0.12	-0.22	0.26	-0.10
Age				0.90*	0.32	0.51
Years in SBAE				0.14	0.35	-0.07
Adj. R <sup>2</sup>		-0.02			0.16	
R <sup>2</sup> Change		0.03			0.20	
<i>F</i>		0.63 (362.87)			3.71 (362.87)	

\*  $p < .05$ 

HLMR was calculated to regress FFA goals achieved on the SEVT tenets in Model 1 and Model 2 added age, and years enrolled in SBAE. Within Model 1, expectancy for success was a significant predictor ( $t_{70} = 4.05, p < .001$ ), accounting for approximately 20% of the variance ( $R^2_{adj} = 0.20, F = 6.75, p < .001$ ). Within Model 2, the linear combination of the SEVT tenets, age, and years enrolled in the SBAE program accounted for approximately 32% of the variance in student ARCP ( $R^2_{adj} = 0.32, F = 7.61, p < .001$ ). Expectancy for success ( $t_{70} = 4.05, p < .001$ ), utility value ( $t_{70} = -2.29, p < .001$ ) and age ( $t_{70} = 3.15, p = .002$ ) were significant predictors.

**Table 4***HLMR Predicting FFA ARCP (n = 70)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
(Constant)	2.14	2.44		-11.17	4.66	
Exp. For Success	2.38*	0.68	0.79	2.55*	0.63	0.85
Utility Value	-1.24	0.64	-0.46	-1.35*	0.59	-0.50
Relative Cost	-.15	.21	-0.09	-0.33	0.20	-0.20
Age				.86*	0.27	0.52
Years in SBAE				-0.34	0.29	-0.19
Adj. R <sup>2</sup>		0.20			0.32	
R <sup>2</sup> Change		0.24			0.14	
<i>F</i>		6.75 (313.44)			7.61 (313.44)	

\*  $p < .05$ 

### Conclusions and Recommendations

We concluded students felt they experienced the tenets of SEVT within SBAE. Prior research demonstrated teachers are supportive in helping students set goals, frame expectations of activities, and fostering self-efficacy (Eccles & Wigfield, 2020; Schunk et al., 2019). The uniqueness of SBAE allows student interests to be present, increasing student motivation (Baker & Robinson, 2017). Interactive activities will increase motivation in the course and lead to students recommending SBAE to peers in the future (Baker & Robinson, 2017). To enhance students' ES, SBAE teachers should consider activities to teach students about SAE and FFA activities to help them feel more confident. The study demonstrated that the avenues for student support had provided the opportunity for students to feel supported and motivated.

We concluded students in the study did not feel strongly about the resources needed to be successful in SBAE. Research has demonstrated coaching and mentoring techniques impact student engagement (Bowling, 2017; Curry, 2017). Teachers must work with students to evaluate the resources needed to have a successful SBAE experience (Eccles & Wigfield, 2020). Without re-evaluating the costs involved in SBAE, programs may lose student engagement in the future.

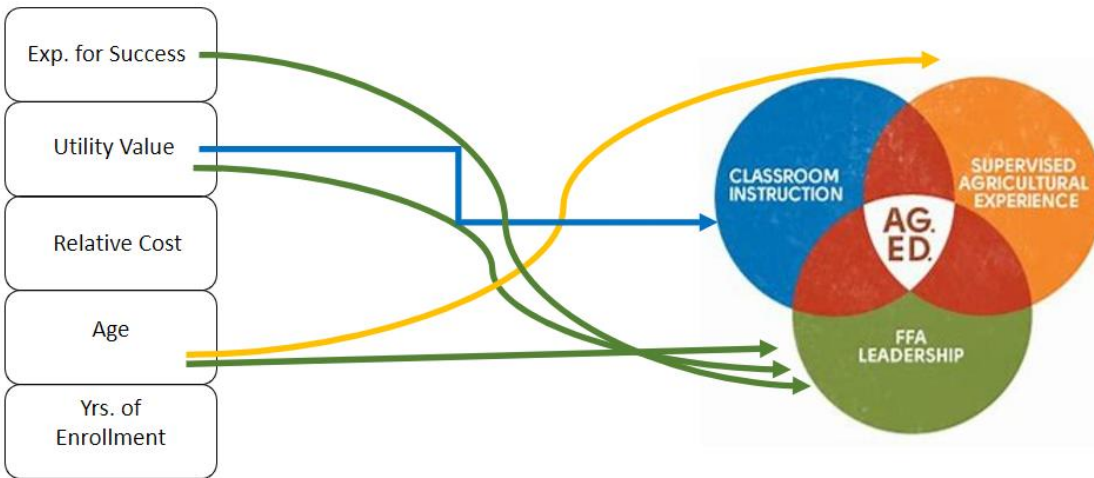
Teacher educators must prepare preservice educators to evaluate and support students in addressing relative cost. SBAE, as a whole, may need to reevaluate the use of student time and effort within the program. However, the cost of engagement in SBAE was not yet problematic for the youth involved in the program.

We concluded students were engaged in activities to help them meet their SBAE goals. Due to the concern for motivation involving sensitive topics like performance-based feedback, the learning environment must also include encouraging messages (Schunk et al., 2019). Teachers must consider providing incentives to support motivation, especially those incentives that reinforce effort over performance (Schunk et al., 2019). Teacher educators and State Staff should provide instruction about supporting student motivation through activities beyond the classroom. The results from the study demonstrated that motivation was supported and incentivized in the classroom, but that wasn't true for those aspects of the program that were outside the classroom component of the SBAE program.

The overall study conclusion was that SEVT could not be fully supported. SEVT postulates that age, years in a learning environment, and the SEVT tenets explored are all significant factors to predict ARCP (Eccles & Wigfield, 2020); however, only some of these factors were significant for this study. Figure 1 demonstrates the significant factors from this study. Since not all of the postulated relationships were present, it would be wise to utilize this questionnaire with larger audiences to see if adding more data would provide a clearer, more complete picture of whether or not the SEVT model fits within each state or the country regarding SBAE program student motivation. In this way, future research could work toward addressing the suitability for the current model for SEVT in SBAE. Additionally, working to conduct related research to learn more about student perspectives about each of the SEVT tenets within their SBAE program experience would be meaningful toward tailoring a questionnaire for students to complete that is specific to SBAE programs. Other aspects of CTE could also be explored to include other learning environments outside of the SBAE pathway. The finite amount of motivation research available regarding SBAE, and other CTE areas needs to be expanded to better inform teacher practice and preservice teacher preparation.

**Figure 1**

*Significant Predictors of ARCP in SBAE Model*



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# **Knowledge and Practices of Youth Development by Youth and Adult Leaders in a Trade Industry**

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## **Introduction**

A vision for promoting the healthy development of young people in addressing their strengths through their voices is Positive Youth Development (PYD) (Lerner et al., 2005). One aspect of PYD is plasticity which means that youth have changes throughout their life. The changes that youth encounter throughout their life can affect how they develop and can influence them (Lerner et al., 2006; Lerner & Lerner, 2013). Positive youth development is a concept that views young people as resources rather than someone struggling with challenges (Lerner et al., 2005; Lerner et al., 2006).

Researchers have indicated that teachers in a formal setting are more knowledgeable about their instruction and content of which they are teaching as compared to youth development professionals (Shulman, 1986; Vance, 2012; Wilson et al., 1987). This is because much of the literature indicated and supported effective teaching practices for those in a more formal setting (Vance, 2012). Educators and those in a non-formal setting play an important role in delivering quality programs for youth. Vance (2012) indicated that non-formal educators' knowledge, that guides their practice, is still not defined for the field. Identifying the knowledge of youth practitioners will help guide researchers to understand how to develop content to help teach and train youth development practitioners. Training youth development practitioners will allow them to enhance their skills, improve the program quality, meet the needs of young people, and deliver effective programs for the members (Bowie & Bronte-Tinkew, 2006).

The American Hereford Association (AHA) is one organization that delivers and designs programs for young people. A nonprofit organization, the AHA provides services for their members, education opportunities, supports youth leadership development, and research while they promote the Hereford breed. While being active members in the National Junior Hereford Association (NJHA), opportunities are provided to young people where they can learn, lead, and achieve so that they can have a bright future within the cattle industry. The AHA was chosen for this research because of the desire to promote research, education, and leadership within their young people. Understanding the knowledge base of PYD by both youth and adults of trade industries, specifically the AHA, will allow them to design activities that meet the developmental needs of their youth and serve them appropriately.

## **Conceptual Framework**

Building from Shulmans (1986) model of Teacher Knowledge, Vance (2012) designed the Emerging Model of Knowledge for Youth Development Professionals. This model consists of five domains: 1) Foundational Knowledge in Positive Youth Development, 2) Knowledge of Youth, 3) Knowledge of Group Facilitation, 4) Knowledge of Context in Organizational Systems and 5) Specialized Youth Development Knowledge (Vance, 2012). The Knowledge for Youth Development Professionals will help guide this research, as it will frame the domain youth and adults are working in based on their knowledge of PYD. Identifying what domain individuals are in will also assist researchers in developing content that will help guide and train non-formal youth professionals.

Understanding the dimensions of PYD theory and how it relates to the practice is known as foundational knowledge. Understanding key concepts behind PYD will allow adults to better serve their young people. The second domain of the Emerging Model (Vance, 2012) is Knowledge of Youth. Understanding youth is important so that activities can be designed appropriately for them (Lauver et al., 2004). A third component of the Emerging Model is Knowledge of Group Facilitation. Youth professionals will often work together with groups both large and small. Within these groups, professionals provide support, share responsibilities, and model processes. Within the group, youth development professionals should support one another and help provide the best strategies to accomplish the task and the learning experience. Youth professionals in groups can help determine the level of control by the youth.

The fourth domain of the Emerging Model (Vance, 2012) includes the knowledge of contexts in organizational systems. Youth professionals should understand that programs should promote the healthy development of young people by providing: 1) psychological safety, 2) appropriate structure, 3) supportive relationships, 4) positive social norms, 5) opportunities for skill building, 6) support for mattering within a community, 7) opportunities to belong, and the 8) integration of school and family, and community. These can be used as a guide to help develop and deliver programs for the young people.

The last area or domain of the Emerging Model (Vance, 2012) is specialized youth development knowledge. Youth development professionals should have a specialized knowledge in which they help deliver programs that offer a learning process in which young people learn through various frameworks and experiences. If youth professionals do not understand positive youth development, this model will help them to identify areas in which they need more training and knowledge.

### **Research Purpose and Objectives**

The purpose of this research was to determine youth and adult leaders' knowledge of positive youth development as well as gauge their perceptions of training for positive youth development within the trade industry. The interview responses are limited to those individuals that participated and their responses and observations made during the interview process. The following objectives were used.

1. Determine the knowledge of positive youth development by youth and adult leaders in a trade industry.
2. Determine youth and adult leaders' perceptions of positive youth development training for the organization.

### **Methods**

The target population for this study consisted of American Hereford Association, junior board members that retired in 2019-2023 (n = 36), ambassadors that served from 2019-2022 (n = 15), and volunteers that were selected by the AHA to participate (n = 15) and have devoted several hours to working with the young people. In addition to the volunteers, the staff within the AHA were included in this study (n = 14). With the previous and current junior board members, ambassadors, volunteers, and AHA staff, the total population was 80.

To understand the knowledge of PYD and to determine their perceptions of PYD training, one-on-one semi structured interviews were conducted. Researchers invited participants to be a part of the one-on-one interview process through an invitation email to all 80 individuals.

This email asked for their participation in a follow up interview based on a survey that was sent to them in a larger study. The email provided the purpose and indicated that confidentiality would be ensured. Researchers then corresponded with those that said yes to set up an interview time through Zoom. There were 12 individuals that volunteered to be a part of the interview process. Of the 12 volunteers, eight were selected to be included because saturation was reached. Of the eight interviews, two were previous junior board members (Lara and Cora), one current junior board member (Tim), two previous ambassadors (Alice and Rachel), and three adult volunteers and leaders (George, Jane, and Jill). Once the transcripts were recorded on Zoom, they were copied onto a Microsoft Word document and all identification was removed and the names of participants were changed to pseudonyms.

The transcript was reviewed and read over; thematic coding was conducted. Researchers identified patterns within a data set and organized the data into various meanings (Braun & Clark, 2012). Once familiar with the data, initial themes began to develop and an audit trail was used for validation and dependability (Ary et al., 2010). After all the data was categorized into a theme, the data that was contained within each theme was transferred into an Excel document and then analyzed into codes. These codes included building the future of youth (statements that related back to youths' knowledge), youth leaders in action (statements that related back to youths' perceptions on a training). The adult codes included making youth the best (statements that relate back to adults' knowledge and building relationships (statements that related to adults' perceptions of a training on PYD).

While conducting and analyzing this research, researchers made sure to address subjectivity. With statements coming from the perspective on how important youth and adult interactions are. Reflexivity was a component of the interview process as researchers took notes and conducted memo writing during the interviews. Rigor was established through design quality (Ary et al., 2010 & Teddlie and Tashakkori, 2006). Design quality refers to the ways in which the design of the research meets the purpose of the study. In addition, Creswell and Tashakorri (2007) and Reio and Wener (2017) demonstrated design qualities that a mixed methods should encompass. They stated that in a mixed method research, the research needs to be well developed as both quantitative and qualitative should be treated equally and that they should not be used to offset each other (Reio & Werner, 2017). In this research both quantitative and qualitative data was reported separately which enhanced the findings from each method and were used as complements of each other (Cresswell & Tashakorri, 2007). Mixed methods research should also be separate in their research questions and hypotheses (Cresswell & Tashakorri, 2007; Reio & Werner, 2017). In this study, specific research questions were answered using quantitative methods and others were used using qualitative methods. The research questions that answered perceptions were answered using a quantitative method, and the research questions that were asking personal experiences and thoughts were used using a qualitative method.

Creswell and Tashakorri (2007) believe that in mixed methods research, both external and internal validity should be reported as well as determining how member checks were handled. In this study, there can be several threats to both internal and external validity. Internal validity is the inferences that are made in which the changes in the dependent variable did cause the change in the independent variable (Ary et al., 2010). External validity refers to the generalizability of the study and if the results can be generalized beyond the setting (Ary et al., 2010). Internal validity in this research includes subject effect, diffusion, and possibly



experimenter effect (Ary et al., 2010). Subject effect occurs when individuals have attitudes that they develop based on the study that is happening. Participants can change their behaviors because they know that they are participating in a study and change their beliefs and attitudes about the subject (Ary et al., 2010). While in communication with participants researchers stressed that confidentiality would be ensured so that they could express their true thoughts and feelings toward the subject. With all personal and contact information removed, it provided a way for conclusions to be drawn anonymously about the subject. Subject effect is also a threat to external validity.

In addition, rigor was established in the qualitative phase as member checks allowed for participant feedback and helped add validity to the research. When the analysis of the interviews was complete, researchers asked participants to review the analysis and check for accuracy which provided insights and more attention to patterns researchers may have missed (Ary et al., 2010). Furthermore, confirmability of the study was addressed in the researcher's reflexivity, and the use of notes, memos and an audit trail of collection and analysis process.

### **Results/Findings**

When asked about PYD, many individuals were in the Foundational Knowledge Stage. Several youths had not heard of the concept of PYD. Other youth indicated their thoughts of "growing the future generations through engagement" (Lara), "positive interactions" (Tim) and "developing skills in yourself" (Alice). As Alice points out, "positive youth development is developing yourself as a person and teaching yourself skills and growing the next generation of people." Adults' definitions of youth development included Jane, who said, "positive youth development is like positive reinforcement and propping them up, and I believe it and I believe that's how we run our deal, yes." George added, "well other than I don't know if I have specifically [heard of] what you're referring to um except that you know it's making the best better, it's the 4-H motto right?"

There were some mixed feelings about training for PYD. Tim states "I think that we are kind of I guess self-taught if that makes sense uh to a point." Lara agreed, "I do think on some level, junior board members are trained in positive youth development." She further adds that although she feels the youth leadership position is self-taught, that a training would be helpful and beneficial. From Lara's conversation it was concluded that because people have different personalities, different ways of communicating they may understand positive youth development differently and because of this you need to understand their views and where they come from. As a previous junior board member, Cora also was another youth leader that believed in a training for young people so that their positive development is supported and shared the following:

Um, I think more education is always good, I do not think that there is any negative downside to having educational opportunities [...] one of the beauties that I got to experience as a youth leader is we are constantly um given new educational opportunities.

Alice, a previous ambassador, summed up her ideas of a positive youth development training nicely when she stated, "um I think that you know everybody could do somewhat of a training, whether it's like job training or working with youth, or you know any sort of those, like you always need to sharpen your skills." As Rachel, a previous ambassador, said, "there's a

difference between you know just casually speaking with kids and having you know meaningful conversation with kids, [...] and helping these kids' um find what they're passionate about.”

Jane, an adult volunteer, provided great thoughts when referencing positive youth development and a training:

I think a lot of times as adults we lose that we were kids once and there becomes this communication gap there becomes this, I don't know if ego is the right word but where you can't lower yourself to get on that younger level and I think we forget how to talk to kids, so I do think a training would be sensational.

Furthermore, Jill, an adult volunteer, suggested that not only on the youths' level but also once they get on the youth's level, to build relationships with them as “there is a need for building relationships with others and other students”, she said. Jane further clarified her thoughts on positive youth development when she said she cannot express or reiterate enough “no judgement” by indicating the following:

Every kid learns different and goes through different phases differently even if they are twins, or full siblings, and sometimes adults cannot handle that; they can't manage that, [...] they [the kids] are just you know on different learnings.

This statement really framed her knowledge on youth development as she realizes that all kids develop differently and at different ages. She proceeded to say that “when teaching young people teach at a non- judgmental caring environment because that is what they [the kids] grow with and we want to be positive and guide them”. While guiding them and teaching them, as an adult volunteer, George suggested that “participants within a training learn best when they are actively engaged and participate in small group.” He further alluded to what Jane recommended and that is to be the “safe place where uh they won't be criticized so they feel that what they have to say will be valued and embraced.”

### **Conclusion**

It can be concluded that many of the youth did not understand what PYD meant, how to implement PYD and carry it out in the organization. Adults did have some perspective on the concept of PYD. Neither group understood the theory and framework of PYD. Given their definitions of PYD, it can be concluded that individuals, both youth and adults, were optimistic about receiving training on what PYD is and how to implement it. Although, some junior board members felt that they are self-taught when working with young people, they agreed that training might be useful as there is a difference between working with youth and saying that you like youth.

### **Implications and Recommendations**

This research has implications for what individuals within a trade industry believe is PYD and how they feel they implement it into the organization. With a lack of knowledge on PYD, it is recommended that a training be offered. This allows both youth and adults to understand the knowledge behind what PYD is and the benefit it can have when working with young people.

It is recommended that leaders within all trade industry organizations participate in a training on PYD. The AHA is an organization that develops and has an impact on young people. Individuals within the organization should participate in training as it would give them knowledge, goals and vocabularies of positive youth development when working with young people. This training would go over the aspects of the model of Youth Development Professionals while teaching the basics of PYD. Several participants had a brief understanding of what PYD is; once a training occurs for the youth and adult leaders, it is recommended that future research discusses how beneficial the training was and if participants' knowledge and perceptions of PYD change.

This research can help inform any organization that works with youth; it is important that youth professionals understand the knowledge and practices behind developing young people. This research consisted of a lack of understanding of PYD. Therefore, having trainings and being clear on what exactly is PYD will help both youth and adults build strong connections and develop young members, appropriately giving them the knowledge of the developmental stages and applying what they have learned in the organization. In addition, it is important for individuals that work with youth to understand positive youth development as they can and have an influence on the development of the young person.

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