

The Emotional Duties of an Agricultural Educator: Evaluating the Confidence Levels of Agricultural Educators to Support Students with Adverse Childhood Experiences

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Abstract

Agricultural educators can have a profound impact on student's lives and are often aware of their students' life experiences outside of the classroom. Students often treat their agricultural educator as a mentor, which increases their likeliness of confiding in them when facing hardships, such as Adverse Childhood Experiences (ACEs). An ACE is defined as a traumatic experience or set of experiences that occur during childhood (ages 0–17). This study aimed to evaluate agricultural educators' personal experiences with ACEs and gauge their confidence levels when emotionally supporting students struggling with ACEs. Using a descriptive, correlational research design, we surveyed 1,075 agricultural educators in four states—Tennessee, Utah, North Dakota, and Illinois—and achieved an 11.91% response rate. The first research objective suggested that agricultural educators had the most experience with physical abuse (Question # 1) and parental mental illness (Question # 9). Furthermore, nearly half (50.2%) of respondents had at least one ACE, and 10.2% had at least four. The second research objective found that agricultural educators were the least confident in emotionally supporting students with issues related to physical or sexual abuse. In addition, they reported the most confidence in supporting students struggling with mental health or parental divorce. This study reinforces the drastic need for agricultural education to increase programmatic development to support students facing emotional trauma and ACEs. Based on the findings of this study, we recommend investigating the benefits of career and technical education, both academically and emotionally, for students with high ACE scores.

Introduction

Agricultural education is a rewarding and fulfilling vocation that has impacted millions of students' lives in the last century. The opportunity to motivate students through leadership opportunities, assist them in developing a passion for the agricultural industry, and guide them to success in their chosen career paths is a worthwhile element of the profession for many educators (National Council for Agricultural Education, 2012; Solomonson et al., 2021). Educators have a profound impact on their students, and many of whom have experienced traumatic situations throughout their young lives (Attwood et al., 2022; Houtepen et al., 2020). Traumatic experiences that occur during childhood (ages 0–17 years) are categorized by the Center for Disease Control (CDC) as Adverse Childhood Experiences (ACEs; CDC, 2022). These ACEs can range from experiences that undermine a child's ability to feel safe, develop appropriately, or bond naturally to their caregivers, such as physical, verbal, or sexual abuse, parental incarceration, substance abuse in the household, parental neglect, or suicide/mental illness in the household (CDC, 2022; CDC, 2023; Felitti et al., 1998; Murphey & Sacks, 2019). When educators are aware of students navigating traumatic events, there are instances where they may need to emotionally support these students (Froiland et al., 2019; Ibrahim & Zaatari, 2020; Martin & Collie, 2019).

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Many psychosocial functions are formed in adolescence when cognitive development is transitioning to adulthood (Silverman & Hinshaw, 2008). ACEs can hinder healthy cognitive growth due to high-stress levels negatively affecting neurodevelopment when the individual experiences the ACE (Gilbert et al., 2015; Goodman, 2017; Petruccelli et al., 2019). According to the CDC (2022), 61% of adults have experienced at least one ACE, and nearly 17% have personal experience with four or more ACEs. These traumatic events can profoundly impact life well into adulthood (Felitti et al., 1998). For example, an individual with four or more ACEs is seven times more likely to abuse alcohol, 10 times more likely to use illicit drugs, and 12 times more likely to attempt suicide than someone without ACEs (Reavis et al., 2013). Furthermore, ACEs lead to higher rates of negative health outcomes, including diabetes, obesity, cardiovascular disease, and depression (Metzler et al., 2017; Monnat & Chandler, 2015; Murphey & Sacks, 2019; Petruccelli et al., 2019). In addition, adults with these types of experiences are more prone to smoking, violent crime, drug use, poverty, dropping out of high school, and unemployment (Petruccelli et al., 2019). In addition to ACEs increasing the rates of negative behavior and subsequent health issues, individuals with childhood trauma are more likely to not have health insurance (Monnat & Chandler, 2015). In turn, these long-term effects can significantly shorten the lifespan of the afflicted individual (Metzler et al., 2017; Monnat & Chandler, 2015; Murphey & Sacks, 2019; Petruccelli et al., 2019).

Blodgett and Lanigan (2018) stated, “Understanding and responding to a child’s ACE profile might be an important strategy for improving the academic trajectory of at-risk children” (p. 2). The CDC (2023) has led the charge to identify students affected by childhood trauma and prevent ACEs before they cause irreparable damage. Since the passage of the Victims of Child Abuse Act of 1990, educators at the primary and secondary levels have been mandated by law to report any suspicions of abuse or neglect (Mathews & Kenny, 2008). Furthermore, numerous states have passed legislation to increase the reporting measures of certain offenses (Mathews & Kenny, 2008). For example, Erin’s Law has been passed in 38 states and requires educators to report any suspected sexual abuse of youth and be trained annually on how to report appropriately (Anderson, 2014). Similar attempts can assist in improving the physical, mental, and academic outcomes of students experiencing negative ACE situations (Anderson, 2014; Blodgett & Lanigan, 2018; Crosby, 2015; Mathews & Kenny, 2008).

While mandated reporting provides educators with a clear path to helping students experiencing trauma, many students in these situations will unfortunately never be assisted (Anderson, 2014; Blodgett & Lanigan, 2018; Crosby, 2015; Mathews & Kenny, 2008; Metzler et al., 2017; Murphey & Sacks, 2019; Petruccelli et al., 2019). Due to this fact, educators are encouraged to use the Whole School, Whole Community, and Whole Child (WSCC) model in their classrooms to help students cope with these situations (Chiang et al., 2015; Keane & Evans, 2022). Because ACEs can influence an individual’s physical, emotional, and academic trajectory, educational administrators must serve these students with a holistic approach (Keane & Evans, 2022). The WSCC model engages the community through 10 outreach efforts to help students cope with ACEs, including (1) physical education and physical activity; (2) nutrition environment and services; (3) health education; (4) social and emotional climate; (5) physical environment; (6) health services; (7) counseling, psychological, and social services; (8) employee wellness; (9) community involvement; and (10) family engagement (Chiang et al., 2015; Keane & Evans, 2022; Lewallen et al., 2015). In addition to the WSCC model, the Trauma-Informed Classroom (TIC) model can also be an asset in mitigating the long-term effect of ACEs (Cavanaugh, 2016; Perry & Daniels, 2016; Pickens & Tschopp, 2017). The TIC model provides educators with a student-centered avenue to build relationships with students to modify behavioral issues (Cavanaugh, 2016; Perry & Daniels, 2016; Pickens & Tschopp, 2017). When the WSCC and TIC models are leveraged, the teacher-student relationship can be a powerful motivator to alter poor behavior, build motivation to succeed, and ultimately improve the outcome of students (Forster et al., 2017; Keane & Evans, 2022; Stoppelbein et al., 2021).

Agricultural educators often report working an average of 58.65 hours per week educating students in grades 7–12 on various agricultural topics, making Supervised Agricultural Experience (SAE) visits to

students' homes, and traveling with students to FFA events (Hainline et al., 2015). This additional time spent with students outside the traditional classroom often allows agricultural educators to make strong personal connections with their students (Bird et al., 2013; Watson et al., 2015). In addition, students often confide in their agricultural educator(s) as a mentor, which often allows the agricultural educator to become more aware of the students' experiences away from the school setting (Bird et al., 2013; Schmidt et al., 2022; Watson et al., 2015). This elevated relationship role can sometimes place an additional emotional burden on the educator, which can increase secondary traumatic stress (Schmidt et al., 2022). According to the National Child Traumatic Stress Network (2023), secondary traumatic stress "is the emotional duress that results when an individual hears about the firsthand trauma experiences of another" (para. 1). Particularly, Schmidt et al. (2022) found that stress transferred from traumatized students to educators through secondary traumatic stress is a positive predictor of burnout levels. While many researchers have investigated educator burnout and job satisfaction, minimal research has been conducted on evaluating agricultural educators' personal experiences with ACEs to gauge their level of preparedness and confidence when interacting with and teaching students with ACEs to address a potential source of emotional stress and burnout.

Purpose and Objectives

The purpose of this study was to evaluate agricultural educators' personal experience with ACEs and gauge the confidence levels of agricultural educators to emotionally support students who struggle with ACEs.

The following research objectives guided this study:

1. Describe agricultural educators' personal experiences with ACEs.
2. Evaluate agricultural educators' confidence levels to emotionally support students with ACE experiences.

Theoretical Framework

We used the Contemporary Trauma Theory (CTT) as the theoretical framework for this study (Goodman, 2017; Van Der Kolk, 2014; Williams, 2006). This theory aims to provide a lens for the effect of trauma on psychosocial functions and how trauma-informed support can ultimately influence the behavior of the afflicted person or persons (Goodman, 2017; Levendosky & Buttenheim, 2010; Shapiro, 2010). Goodman (2017) also expressed that childhood trauma can overwhelm a "person's sense of control, which may lead to maladaptive internalization of the event. Such maladaptive internalization may result in disturbance to bio-psychosocial functioning, healthy development, and brain performance in regions that are related to emotions, behavior, and executive functioning" (p. 187). Furthermore, the CTT depicts how resilience, coping, and the current trauma symptoms of the afflicted impact their behavior (Goodman, 2017). The curative nature of resilience and coping are considered some of the most effective traits for mitigating the negative effects from ACEs and modifying future behavior (Goodman, 2017). Furthermore, the CTT shifts the theoretical paradigm used to treat childhood trauma from one where the afflicted person is not viewed as weak, ill, or morally deficient, but instead, as one who needs proper care and resources to heal appropriately (Goodman, 2017). The CTT is based on five central principles:

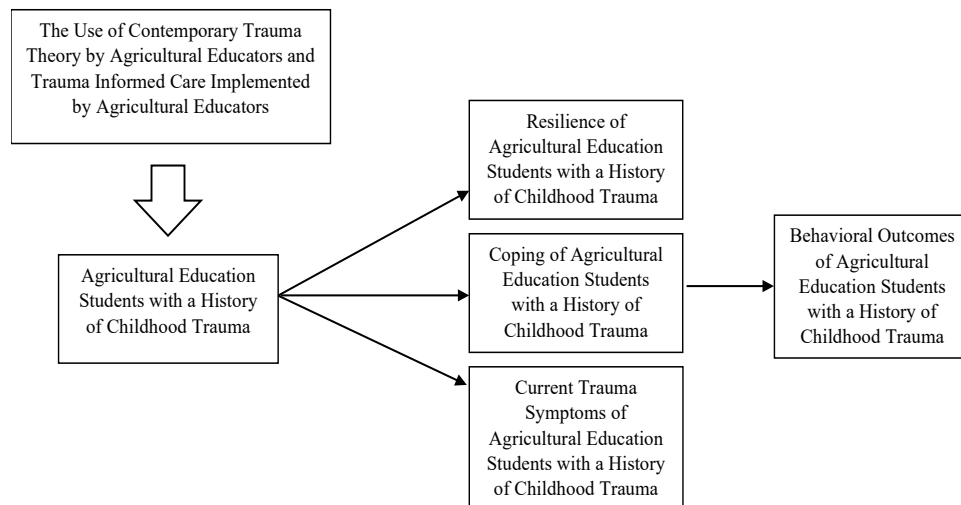
1. *Dissociation*: Dissociation of childhood trauma involves the division of the afflicted individual's personality that determines future characteristic thoughts, feelings, and behavior (Goodman, 2017; Nijenhuis & van der Hart, 2011). This dissociation is closely related to coping and resilience and is the most common defense mechanism to mitigate the effects of trauma (Van Der Kolk, 2014; Williams, 2006).
2. *Attachment*: Childhood trauma can impair the afflicted individual's ability to bond naturally, establish trust, and form interpersonal relationships (Goodman, 2017; O'Connor & Elklit, 2008; Tarren-Sweeney, 2013).

3. *Reenactment*: Reenactment is a phenomenon where the afflicted individual’s behavior and chosen relationships recreate the traumatic event (Courtois & Ford, 2016; Goodman, 2017). This occurrence is often associated with a sense of familiarity and control for the afflicted (Goodman, 2017; Van Der Kolk, 2014).
4. *Long-Term Effect on Later Adulthood*: The long-term effects of childhood trauma can lead to destructive behavior and health issues throughout adulthood (Goodman, 2017; Metzler et al., 2017; Monnat & Chandler, 2015; Murphey & Sacks, 2019; Petruccelli et al., 2019). In addition, the capacity to form interpersonal relationships can diminish (Goodman, 2017; O’Connor & Elklit, 2008; Tarren-Sweeney, 2013).
5. *Impairment in Emotional Capacities*: Prolonged exposure to childhood trauma can cause a decreased sense of calm and safety which are critical for neurodevelopment (Badenoch, 2008; Van Der Kolk, 2014). Furthermore, victims of childhood trauma often have trouble regulating emotions, identifying the emotions of others, and self-regulating subsequent behavior (Levendosky & Buttenheim, 2010; Shapiro, 2010).

These five central principles guide how the CTT informs educators and mental health practitioners on how to approach healing. The agricultural educators’ unique positioning to emotionally support students struggling with childhood trauma (Schmidt et al., 2022) can be a vessel for the CTT. Engaging the CTT, alongside the WSCC and TIC models, can provide an avenue for educators to leverage teacher-student relationships for emotional guidance and assist in the development of the resiliency and coping skills necessary to mitigate the negative effects of childhood trauma. Investigating agricultural educators’ personal experiences with ACEs and evaluating their confidence in supporting students in these situations can assist in gauging the emotional condition of agricultural educators. Therefore, assessing agricultural educators’ experiences with ACEs and their confidence levels to emotionally support students with ACE experiences will provide valuable insight into the preparation needed for agricultural educators to support these students. The interaction between agricultural educators’ use of the CTT and its impact on students is depicted in Figure 1.

Figure 1

Contemporary Trauma Theory in Agricultural Education



Note. We adapted this model from Goodman (2017).

Method

We used a descriptive correlational research design in this study. Descriptive correlational research describes the relationships between variables rather than causal factors (Lappe, 2000), which best suited this study's research objectives. The research instrument measured agricultural educators' personal childhood experiences, assessed agricultural educators' confidence in supporting students with ACEs, and evaluated the participants' demographics.

Population

We used a census approach to survey agricultural educators in four states—Tennessee, Utah, North Dakota, and Illinois. To develop the frame for the study, we purposively selected one state from each of the four National FFA regions (National FFA Organization, 2023) to gauge a broad geographical representation of states with varying FFA membership sizes. Each selected state also had an accessible online listserv that allowed us to invite them to participate in the study via email. The compiled list contained viable email addresses for 349 agricultural educators in Tennessee, 159 in Utah, 64 in North Dakota, and 503 in Illinois ($N = 1,075$).

The most notable demographic variables in the study included 54.9% ($f = 67$) of the participants being female agricultural educators and 97.6% ($f = 119$) being White/Caucasian. Furthermore, 92.3% ($f = 112$) of educators had a bachelor's or master's degree as their highest degree earned, and 84.3% ($f = 102$) taught in a one- or two-teacher agricultural education program. In addition, 43.8% ($f = 50$) taught in a self-reported, rural school system, and 82.0% ($f = 105$) received their teacher certification through a teacher preparation program. Overall, 67.8% ($f = 82$) of participants were married, 70.3% ($f = 85$) were on a 12-month contract or more, 91.7% ($f = 111$) did not coach a sport, and 74.4% ($f = 90$) only taught agricultural education courses. The population is further described in Table 1.

Table 1

Demographic Data of Agricultural Educator Participants (n = 128)

Demographic Area	Sub-area	<i>f</i>	%
Gender	Female	67	54.9
	Male	55	45.1
Race	White/Caucasian	119	97.6
	Black/African American	1	0.8
	Other	2	1.6
Highest Degree Earned	No Degree	1	0.8
	Associates	3	2.5
	Bachelor's Degree	64	52.9
	Master's Degree	48	39.7
	Specialist	1	0.8
	Doctoral	4	3.3
Teacher Certification	Traditional Certification	105	82.0
	Alternative Certification	18	14.1
	Other	5	3.9
School System Type	City School System	42	34.7
	County School System	53	43.8
	Other	26	21.5

Demographic Area	Sub-area	<i>f</i>	%
Size of Agricultural Department	1 Teacher	62	51.2
	2 Teachers	40	33.1
	3 Teachers	13	10.7
	4+ Teachers	6	5.0
Relationship Status	Married	82	67.8
	Relationship but not Married	12	9.9
	Divorced/Widowed	7	5.8
	Single	20	16.5
Length of Teaching Contract (With State Sponsored Days)	9 Month	12	9.9
	10 Month	15	12.4
	11 Month	9	7.4
	12 Month	79	65.3
	12 Month +	6	5.0
Coach a Sport	Yes	10	8.3
	No	111	91.7
Teaching Other Subjects Besides Agricultural Education	Yes	31	25.6
	No	90	74.4

Note. Retained partial responses caused the *n* to vary in some demographic categories. These figures represent participants from the four selected states—Tennessee, Utah, North Dakota, and Illinois.

Instrumentation

The instrumentation used in the study evaluated the personal childhood experiences of agricultural educators, their confidence to support students facing ACEs, and the demographics of the participants. We assessed the agricultural educators' personal childhood experiences using a modified ACE questionnaire, which was adapted from the official ACEs survey developed by the CDC-Kaiser Permanente study (Felitti et al., 1998) and the World Health Organization (WHO; 2022). The ACEs questionnaire consisted of 10 items seeking “Yes” or “No” responses. For every question that participants answered “Yes,” we added one point to their ACE comprehensive score with a maximum score of 10. The official ACEs survey questions are listed in Table 2 (Felitti et al., 1998; WHO, 2022).

Table 2

Adverse Childhood Experiences (ACEs) Questionnaire

Question #1	Did a parent or other adult in the household often: Swear at you, insult you, put you down, or humiliate you? Or act in a way that made you afraid that you might be physically hurt?
Question #2	Did a parent or other adult in the household often: Push, grab, slap, or throw something at you? Or, ever hit you so hard that you had marks or were injured?
Question #3	Did an adult or person at least five years older than you ever: Touch or fondle you or have you touch their body in a sexual way? Or, attempt or have sexual intercourse with you?

Question #4	Did you often feel that: No one in your family loved you or thought you were important or special? Or your family didn't look out for each other, feel close to each other, or support each other?
Question #5	Did you often feel that: You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? Or your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
Question #6	Were your parents ever separated or divorced?
Question #7	Were any of your parents or other adult caregivers: Often pushed, grabbed, slapped, or had something thrown at them? Or sometimes or often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?
Question #8	Did you live with anyone who was a problem drinker or alcoholic, or who used street drugs?
Question #9	Was a household member depressed or mentally ill, or did a household member attempt suicide?
Question #10	Did a household member go to prison?

Note. We adapted some language in the 10 Adverse Childhood Experiences (ACEs) questions (Felitti et al., 1998; WHO, 2022) to specifically address agricultural educators.

To begin the questionnaire, we asked participants to reflect on their personal experiences and disclose as much information as they felt comfortable, but we reassured them that their responses would remain anonymous and confidential. The confidence levels of agricultural educators to emotionally support students who have faced or are facing ACEs were assessed using a five-point, Likert-type scale (1 = *Not Confident at All*; 2 = *Somewhat Confident*; 3 = *Moderately Confident*; 4 = *Very Confident*; 5 = *Extremely Confident*). We designed the demographic questions in the instrument to gauge the educator's potential exposure to ACE scenarios in their school setting.

Validity and Reliability

We measured the survey instrument's reliability post hoc utilizing Cronbach's Alpha and deemed the instrument suitable for the purpose of the study. The reliability coefficient for the scale measuring the confidence levels of agricultural educators to emotionally support students with ACEs was $\alpha = 0.96$. According to Ary et al. (2010), the reliability threshold for a quality analysis is 0.90. Felitti et al. (1998) also validated the instrument in their study. To ensure content, construct, and face validity of the instrument for this audience, a panel of two faculty at New Mexico State University assessed the instrument.

Data Collection

We compiled a list of names and email addresses using resources from the four state's online agricultural educator directories. We invited each educator to participate in the study via their employer's email address. Upon the first invitation email, we sent three reminder emails to increase the response rate (Dillman et al., 2014). Due to reporting mistakes in the agricultural educator online directories, frame error is a possible limitation of the study (Zhengdong, 2011). To reduce the risk of sampling bias, we used a census approach by emailing all of educators in the four states selected for the study.

Ramsey and Schafer (2012) suggested that at least 30 responses are needed for baseline descriptive research. We achieved a total of 128 ($n = 128$) responses for a response rate of 11.91%. We retained partial

responses of participants who completed the instrument but not the demographics, and we achieved 121 ($n = 121$) complete responses and seven ($n = 7$) partial responses. Baruch (1999), consistent with findings from Mavis and Brocato (1998), observed that response rates have declined over time, and electronic survey methods have yielded lower response rates. Even still, the findings of this study should not be generalized past the assessed participants.

To assess non-response bias, we used independent samples t -tests to compare differences between early and late responders (Lindner et al., 2001). To mitigate non-response bias, we sent four emails to recruit new participants (Dillman et al., 2014). Participants whose response was stimulated from the first introductory email were considered early respondents ($n = 55$), and participants whose response was stimulated from the three reminder emails were considered late respondents ($n = 67$). We found no statistical differences after analyzing for non-response bias, and the t -test results are reported in Table 3.

Table 3

Results from the t-test Assessing Non-Response Bias

Constructs	n	M	SD	t	df	p	Cohen's d
Early Responders	55	2.78	0.96				
Question #1				-0.99	120	0.32	-0.18
Late Responders	67	2.96	0.96				
Early Responders	55	2.56	0.98				
Question #2				-1.65	120	0.10	-0.30
Late Responders	67	2.87	1.03				
Early Responders	55	2.13	1.11				
Question #3				-1.66	120	0.10	-0.30
Late Responders	67	2.46	1.12				
Early Responders	55	2.85	0.99				
Question #4				-0.56	120	0.58	-0.10
Late Responders	67	2.96	0.99				
Early Responders	55	2.82	0.95				
Question #5				-1.16	120	0.25	-0.21
Late Responders	67	3.03	1.04				
Early Responders	55	3.33	1.02				
Question #6				-0.71	120	0.48	-0.13
Late Responders	67	3.46	1.06				
Early Responders	55	2.45	1.05				
Question #7				-1.22	120	0.23	-0.22
Late Responders	67	2.69	1.05				
Early Responders	55	2.73	0.99				
Question #8				-0.88	120	0.38	-0.16
Late Responders	67	2.90	1.09				
Early Responders	55	2.73	1.03				
Question #9				-1.44	120	0.15	-0.26
Late Responders	67	3.00	1.06				
Early Responders	55	2.62	0.95				
Question #10				-1.92	120	0.06	-0.35
Late Responders	67	2.99	1.12				

Note. $\alpha = .05$. The Likert scale ranged from 1 = *Not Confident at All*; 2 = *Somewhat Confident*; 3 = *Moderately Confident*; 4 = *Very Confident*; 5 = *Extremely Confident*.

Data Analysis

We used central tendencies through frequencies and percentages to analyze research objectives one and two, and all analyses occurred using SPSS Version 28.0.

Limitations

The generalizability of these results is limited to the agricultural educators who took part in this study due to the relatively low response rate (11.91%). The authors largely contribute this low response rate to the highly personal nature of the questions asked in this study. In addition, because the instrument only focused on the 10 ACEs outlined by Felitti et al. (1998) and WHO (2022), the instrument likely did not assess every potential traumatic event an agricultural educator may encounter or may have personally faced. Similarly, due to the highly sensitively nature of the ACE questionnaire (Felitti et al., 1998; WHO, 2022), some educators may have not felt comfortable answering the questions honestly, which may have resulted in inaccurate data portrayal in some responses.

Results

Research Objective One

The first research objective evaluated agricultural educators' personal experiences with ACE circumstances (see Table 4). Of the 128 total responses, 50.8% ($f = 65$) of respondents had at least one ACE experience, and 10.2% ($f = 13$) had at least four ACE experiences.

Table 4

Personal Childhood ACE Experiences of Agricultural Educators

	Yes (f)	%	No (f)	%
Question #1	32	25.0	96	75.0
Question #2	16	12.5	112	87.5
Question #3	11	8.6	117	91.4
Question #4	15	11.7	113	88.3
Question #5	4	3.1	124	96.9
Question #6	24	18.8	104	81.2
Question #7	8	6.3	120	93.8
Question #8	19	14.8	109	85.2
Question #9	30	23.4	98	76.6
Question #10	0	0.0	128	100.0

Note. The 10 questions represent the self-assessed ACEs (Felitti et al., 1998; WHO, 2022) that the educators may have experienced in the past.

The most common ACE experience was Question #1, "Did a parent or other adult in the household often: Swear at you, insult you, put you down, or humiliate you? Or act in a way that made you afraid that you might be physically hurt?". Approximately 25.0% ($f = 32$) of agricultural educators had experience with this ACE scenario. The second most common ACE experience was Question #9, "Was a household member depressed or mentally ill, or did a household member attempt suicide?". Of the participating agricultural educators, 23.4% ($f = 30$) answered yes. Finally, the third most common ACE experience was Question #6, "Were your parents ever separated or divorced?". Twenty-four (18.8%) agricultural educators said yes.

Research Objective Two

The second research objective aimed to assess agricultural educator's confidence in emotionally supporting students who had ACE experiences (see Table 5). The confidence levels of agricultural educators varied between each ACE question. For example, the ACE experience that agricultural educators had the least confidence when emotionally supporting students was Question #3, "Did an adult or person at least five years older than you ever: Touch or fondle you or have you touch their body in a sexual way? Or attempt or have sexual intercourse with you?". Seventy-three (59.8%) agricultural educators claimed to either have no confidence or be somewhat confident in emotionally supporting a student with this ACE, and only 16.4% ($f = 20$) of agricultural educators claimed to be either very confident or extremely confident.

Table 5*Confidence Levels of Agricultural Educators to Emotionally Support Students with ACEs*

	No Confidence f (%)	Somewhat Confident f (%)	Moderately Confident f (%)	Very Confident f (%)	Extremely Confident f (%)
Question #1	6 (4.9%)	39 (32.0%)	48 (39.4%)	22 (18.0%)	7 (5.7%)
Question #2	13 (10.7%)	38 (31.1%)	46 (37.7%)	19 (15.6%)	6 (4.9%)
Question #3	35 (28.7%)	38 (31.1%)	29 (23.8%)	16 (13.1%)	4 (3.3%)
Question #4	6 (4.9%)	40 (32.8%)	42 (34.4%)	27 (22.1%)	7 (5.7%)
Question #5	6 (4.9%)	39 (32.0%)	42 (34.4%)	27 (22.1%)	8 (6.6%)
Question #6	4 (3.3%)	20 (16.4%)	40 (32.8%)	39 (32.0%)	19 (15.6%)
Question #7	20 (16.4%)	38 (31.1%)	42 (34.4%)	17 (13.9%)	5 (4.1%)
Question #8	9 (7.4%)	44 (36.1%)	37 (30.3%)	24 (19.7%)	8 (6.6%)
Question #9	9 (7.4%)	38 (31.1%)	44 (36.1%)	21 (17.2%)	10 (8.2)
Question #10	9 (7.4%)	44 (36.1%)	39 (32.0%)	20 (16.4%)	10 (8.2%)

Note. The scales are reported using a five-point, Likert-type scale (1 = *Not Confident at All*; 2 = *Somewhat Confident*; 3 = *Moderately Confident*; 4 = *Very Confident*; 5 = *Extremely Confident*).

The ACE question that participants had the most confidence in emotionally supporting students with was Question #6, "Were your parents ever separated or divorced?". Fifty-eight (47.6%) agricultural educators reported being very confident or extremely confident in supporting students with this ACE, and only 19.7% ($f = 24$) reported having no confidence or being somewhat confident. The ACE question that agricultural educators had the second most confidence in supporting was Question #5, "Did you often feel that: You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? Or your parents were too drunk or high to take care of you or take you to the doctor if you needed it?". Thirty-five (28.7%) agricultural educators reported being very confident or extremely confident in supporting students who struggle with this ACE; however, 36.9% ($f = 45$) of agricultural educators reported having no confidence or being somewhat confident in supporting these students.

The ACE question that agricultural educators had the second least confidence in emotionally supporting students was Question #7, "Were any of your parents or other adult caregivers: Often pushed, grabbed, slapped, or had something thrown at them? Or sometimes or often kicked, bitten, hit with a fist, or hit with something hard? Or ever repeatedly hit over at least a few minutes or threatened with a gun or knife?". Only 22 (18.0%) agricultural educators claimed to be very confident or extremely confident in emotionally supporting students facing these situations. Furthermore, 47.5% ($f = 58$) claimed to either have no confidence or be somewhat confident in emotionally supporting these students.

Discussions and Conclusions

Agricultural education can have a profound impact on the lives of students. Agricultural educators can serve adolescent students by preparing them for “informed choices in the global agriculture, food, fiber, and natural resources systems” (National Council for Agricultural Education, 2012, para. 3). As a result, agricultural educators are often more aware of students’ experiences outside of the classroom (Schmidt et al., 2022). According to Hainline et al. (2015), agricultural educators reported working 58.65 hours per week, many of which are through supporting SAE project development and travel associated with contests or conferences. This close, personal connection with students can make the agricultural educator more aware of their students’ situations outside of the classroom (Schmidt et al., 2022). Therefore, it is vital to support educators who work with students facing serious life challenges, and sometimes life-threatening circumstances, through ACEs. Because ACEs often have lifelong lasting impacts on children and youth (Blodgett & Lanigan, 2018), equipping educators with resources to emotionally support students and connect them with appropriate resources could be as consequential as saving a student’s life. These resources could also help with the emotional toll that an educator may experience as they support students who have experienced, who are experiencing, or who may experience ACEs (Houtepen et al., 2020).

The first research objective investigated agricultural educators’ personal experiences with ACEs. The most common ACE among agricultural educators was “Did a parent or other adult in the household often: Swear at you, insult you, put you down, or humiliate you? Or act in a way that made you afraid that you might be physically hurt?” with one in every four agricultural educators reporting experience with this traumatic event. The second most common ACE experienced by agricultural educators included, “Was a household member depressed or mentally ill or did a household member attempt suicide?”, which occurred slightly less often with 23.4% ($f = 30$) reporting “yes”. Finally, the third most common ACE experience was, “Were your parents ever separated or divorced?” These results are aligned with Felitti et al.’s (1998) findings, which discovered that these ACEs were more prevalent in their sample of 17,000+ individuals.

The first research objective also determined that nearly half of the participating agricultural educators had experienced at least one ACE, and one in every 10 educators had at least four ACEs. These figures were slightly lower than Felitti et al.’s (1998) study where 63.6% of adults had at least one ACE and 12.2% had experienced at least four ACEs. This seemingly lower presence of ACEs among agricultural educators as compared to the general population is positive for the profession. Conversely, Felitti et al. (1998) also reported that of their study’s participants who had graduated college ($f = 3,499$), 48.6% experienced at least one ACE and 11.4% had experienced four or more ACEs. In the study herein, 99.2% of the agricultural educators graduated college with at least an associate degree, which might be a closer comparison.

The second research objective determined that agricultural educators feel somewhat confident or moderately confident when emotionally supporting students who have experienced ACEs. However, agricultural educators felt the least confident in emotionally supporting students with issues related to physical or sexual abuse (e.g., ACE questions #2, #3, and #7; Felitti et al., 1998; WHO, 2022). Additionally, agricultural educators felt the most confident assisting students with issues related to mental health and parental divorce or separation (e.g., ACE questions #6 and #9).

Recommendations and Implications for Future Practice

While agricultural educators are not, and should not be treated as, trained counselors or psychologists, they are often a comforting figure to students. Schmidt et al. (2022) found that as early-career agricultural educators become more aware of their students’ ACEs, a moderate level of secondary traumatic stress can be transferred from the student to the educator. Overall, most educators care deeply about the well-being of their students and reported that their passion for students is among the leading

causes for remaining in the profession (Solomonson et al., 2021). This deep enthusiasm for students coupled with the transfer of secondary traumatic stress to educators, leads us to recommend providing extensive training to agricultural educators on how to support students experiencing ACEs properly and appropriately. Furthermore, this training should focus specifically on how to support students facing physical and sexual abuse since educators reported being the least confident in assisting students experiencing these specific ACEs. The fact that physical and sexual abuse were selected as some of the areas that agricultural educators felt the least confident in supporting students can be coupled with agricultural educators being legally mandated to report these same issues to the proper authorities (Mathews & Kenny, 2008). The potential legal ramifications for educators not reporting suspected physical or sexual abuse could also be valuable components educators should be trained in to avoid the risk of a criminal offense.

The development of agricultural educators' confidence and subsequent abilities to emotionally support students with ACEs could potentially have implications for strategic classroom management. Individuals with high ACE scores can be more prone to violent crime, drug use, poverty, and unemployment (Petruccelli et al., 2019). These traumatic issues could lead to behavioral problems in the classroom. Similarly, if agricultural educators can employ strategies from the WSCC and/or TIC models, improved teacher-student relationships could develop, which, subsequently, could lead to better behaviors in the classroom and a higher willingness to participate in instructional activities (Forster et al., 2017; Keane & Evans, 2022; Stoppelbein et al., 2021).

The contemporary trauma theory also has implications for the agricultural education classroom (Goodman, 2017; Van Der Kolk, 2014; Williams, 2006). This theory depicts how trauma-informed care can provide the afflicted person(s) with an avenue to cope with past experiences (Goodman, 2017). Developing healthy coping mechanisms is one of the strategies targeted by experts in this area (Goodman, 2017). As agricultural educators become more educated on how to effectively support students experiencing ACEs, they increase their potential to help students develop healthy coping skills. As a result, improved coping skills have been directly linked to improving the afflicted individuals' future successes (Goodman, 2017; Van Der Kolk, 2014; Williams, 2006).

Recommendations and Implications for Future Research

We recommend investigating the benefits of career and technical education, both academically and emotionally, for students with high ACE scores. The WSCC and TIC models encourage community support surrounding a student's holistic lifestyle. Four outreach efforts guided by the WSCC model (Chiang et al., 2015; Keane & Evans, 2022) can also be connected to career and technical education, namely through agricultural education, including physical education and physical activity, nutritional environment and services, health education, community involvement; and family engagement. Therefore, we recommend investigating the impact of the hands-on nature of career and technical education courses on students seeking belonging and purpose in the classroom.

Although the percentage is relatively low, nearly one in 10 of the participating educators had experienced at least four or more ACEs. Therefore, phenomenological research on the strategies agricultural educators use to emotionally support students with ACEs could provide insight into how future educators can successfully navigate supporting students who have experienced childhood trauma, especially when the educator may also be coping with their own ACE(s) experience(s). In addition, we recommend replicating this study in other geographical regions, while also evaluating if different demographic variables (e.g., socioeconomic status of the community, rural versus urban communities, age in which the ACE occurred, etc.) can be associated with the prevalence of students experiencing ACEs. If individuals with four or more ACEs are exponentially more likely to abuse alcohol, use illicit drugs, and attempt suicide (Reavis et al., 2013), it may be valuable to investigate which demographic correlations may or may not exist to mitigate the prevalence of ACEs in communities before they may occur.

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