Stress versus Eustress: Evaluating the Effects of Compassion Fatigue and Secondary Traumatic Stress on Agricultural Educator Burnout

William Norris, Ph.D.
PO Box 30003 MSC 3501
Las Cruces, NM 88003-8003
(575) 646-4539
wnorris1@nmsu.edu

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Introduction, Purpose, and Objective

School-based agricultural education (SBAE) has immensely impacted millions of students throughout its 100+ year history. Unfortunately, many students enrolled in SBAE are experiencing Adverse Childhood Experiences (ACEs) that can negate the positive influence of SBAE (Norris & Norris-Parish, 2024). ACEs are traumatic situations occurring from ages 0-17, such as physical, emotional, or sexual abuse, parental divorce, neglect, etc. (Petruccelli et al., 2019). The presence of multiple ACEs can lead to an increased risk of negative behavior such as drug abuse, 50+ sexual partners, and unemployment (Reavis et al., 2013). Additionally, individuals with ACEs have an increased risk of health issues such as diabetes, addiction, and cardiac disease (Metzler et al., 2017; Murphey & Sacks, 2019; Petruccelli et al., 2019). Norris and Norris-Parish (2024) determined that agricultural educators often emotionally support students with ACEs but do not feel confident supporting students experiencing certain situations. Additionally, Schmidt et al. (2022) found that compassion fatigue from emotionally supporting students with ACEs can lead to Secondary Traumatic Stress (STS) and contribute to educator burnout among early career educators in Oregon. One of the greatest challenges facing agricultural education is the difficulty of recruiting and retaining quality agricultural educators (Lemons et al., 2015), and burnout has proven to be one of the primary factors driving educators out of the profession (Sorensen et al., 2016). This study sought to replicate Schmidt et al.'s (2022) study with New Mexico agricultural educators and evaluate compassion fatigue and STS on educator burnout. The following research objective guided this study:

1.) Evaluate the effects of secondary traumatic stress on agricultural educator burnout.

Theoretical Framework

The Contemporary Trauma Theory (CTT) guided this study in its effort to quantify compassion fatigue and STS' effects on educator burnout (Goodman, 2017). This theory aims to provide insight into ACEs' effect on psychosocial function (Goodman, 2017). The presence of long-term trauma during adolescence can negatively affect brain development (Petruccelli et al., 2019). This is evident when individuals with four or more ACEs are 32 times more likely to be labeled as a disciplinary issue and to perform poorly academically (Scott et al., 2013). In the context of this study, if agricultural educators can be equipped to implement the CTT effectively, it could mitigate the long-term effects of ACEs for some SBAE students.

Methods

This study utilized a descriptive correlational research design to assess compassion fatigue and STS' effect on educator burnout. The population for this study was agricultural educators in New Mexico ($N = 132$). To maximize participation and increase the response rate of the study, I asked agricultural educators present at the 2024 summer teacher conference to complete the electronic survey. After the conference, I distributed the survey to all agricultural educators in New Mexico and asked them to participate as they did not complete the survey at the conference. This effort yielded 67 responses, which equates to a 50.8% response rate. Within the 67 responses, there were $n = 59$ complete responses and $n = 8$ incomplete responses. The incomplete responses were excluded from parametric analysis due to insufficient critical data.

The instrument utilized in this study was developed from the Professional Quality of Life (ProQOL) survey (Stamm, 2010). The ProQOL survey The ProQOL measures three aspects of professional quality of life: Compassion Satisfaction (pleasure you derive from being able to support students), Burnout (fatigue, frustration, animosity towards your career), and Secondary Traumatic Stress (stress derived from supporting individuals with trauma) (Stamm, 2010). Additionally, this study sought to replicate Schmidt et al.'s (2022) inquiry. The instrument for this study asked participants to rate how often they felt a particular emotion towards their work in the last 30 days. This rating process was accomplished by using a Likert scale that ranged from 1 = *None*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Very Often.* The instrument's reliability was measured *post hoc* using Cronbach's alpha reliability coefficients, which ranged from .75 to .92. According to Ary et al. (2010), the reliability coefficients meet the minimum threshold for a quality analysis. The instrument's validity was assessed by a committee of two New Mexico State University faculty that deemed the instrument acceptable. Additionally, the reliability and validity of the ProQOL instrument have been measured in 200+ studies (Stamm, 2010). The positively worded items in the instrument were reverse-coded per the ProQOL self-score manual to analyze the data accurately (Stamm, 2010). The data for the research objective was analyzed using a linear regression.

Results

A simple linear regression was employed to measure the association between burnout and STS. The results of this analysis suggest that there is a statistically significant association between burnout and STS [$F(1, 57) = 38.87$, $p < .001$] with an adjusted R^2 of .40 (See Table 1). This suggests that 40% of the variance in burnout is explained by STS. Additionally, the analysis suggests that as STS levels increase, the level of burnout subsequently increases.

Table 1

Regression Analysis Assessing STS Effect on Burnout

Variable	B	*β*	*p*
(Constant)	7.22	-	.01
STS	.75	.64	<.001

Note. $n = 59$

Conclusions and Recommendations

The results of this study suggest a positive association between STS and burnout, similar to the findings of Schmidt et al. (2022). This compassion fatigue and STS can compound the teacher attrition issues plaguing the agricultural education profession (Schmidt et al., 2022). Norris and Norris-Parish (2024) determined that approximately 10.2% of agricultural educators have four or more ACEs. Individuals with four or more ACEs have a significantly increased risk of negative behavior and health risks (Metzler et al., 2017; Murphey & Sacks, 2019; Petruccelli et al., 2019) and, when combined with compassion fatigue and STS, it could compound these negative effects. This combination could significantly affect the health of agricultural educators with ACEs. Additionally, Norris and Norris-Parish (2024) found that agricultural educators are often not confident in their abilities to support students with ACEs emotionally. This lack of confidence could be due to the STS experienced from supporting these unique students. The researchers recommend providing mental health services to educators facing STS and providing training to better equip educators to support students with ACEs.

References

Ary, D., Jacobs, L. C., Sorensen, C. K., & Walker, D. A. (2010). *Introduction to research in education* (8th ed.). Wadsworth, Cengage Learning.

Goodman, R. (2017). Contemporary trauma theory and trauma-informed care in substance use disorders: A conceptual model for integrating coping and resilience. *Advances in Social Work, 18*(1), 186–201. https://doi.org/10.18060/21312

Lemons, L. L., Brashears, M. T., Burris, S., Meyers, C., & Price, M. A. (2015). Factors contributing to attrition as reported by leavers of secondary agriculture programs. *Journal of Agricultural Education*, *56*(4), 17–30. https://doi.org/10.5032/jae.2015.04017

Metzler, M., Merrick, M. T., Klevens, J., Ports, K. A., & Ford, D. C. (2017). Adverse childhood experiences and life opportunities: Shifting the narrative. *Children and Youth Services Review*, *72*, 141–149. https://doi.org/10.1016/j.childyouth.2016.10.021

Norris, W., & Norris-Parish, S. (2024). The emotional duties of an agricultural educator: Evaluating the confidence levels of agricultural educators to support students with adverse childhood experiences. *Journal of Agricultural Education*, *65*(1), 193–209. https://doi.org/10.5032/jae.v65i1.2460

Murphey, D., & Sacks, V. (2019). Supporting students with adverse childhood experiences: How educators and schools can help. *American Educator, 43*(2), 8–11. https://files.eric.ed.gov/fulltext/EJ1218833.pdf

Petruccelli, K., Davis, J., & Berman, T. (2019). Adverse childhood experiences and associated health outcomes: A systematic review and meta-analysis. *Child Abuse & Neglect, 97*(2), 112–124. https://doi.org/10.1016/j.chiabu.2019.104127

Schmidt, K. J., Milliken, D. B., Morales, A. M. G., Traini, H. Q., & Velez, J. J. (2022). When teaching hurts: Exploring the secondary traumatic stress experiences of early-career SBAE teachers. *Journal of Agricultural Education*, *63*(3), 216–232. https://doi.org/10.5032/jae.2022.03216

Scott, B. G., Burke, N. J., Weems, C. F., Hellman, J. L., & Carrion, V. G. (2013). The interrelation of adverse childhood experiences within an at-risk pediatric sample. *Journal of Child & Adolescent Trauma*, *6*(1), 217–229. https://doi.org/10.1080/19361521.2013.811459

Sorensen, T. J., McKim, A. J., & Velez, J. J. (2016). A national study of work-family balance and job satisfaction among agriculture teachers. *Journal of Agricultural Education*, *57*(4), 146–159. https://doi.org/10.5032/jae.2016.04146

Stamm, B. H. (2010). The Concise ProQOL Manual (2nd ed.). https://proqol.org/uploads/ProQOLManual.pdf