

When Teaching Hurts: Exploring the Secondary Traumatic Stress Experiences of Early-Career SBAE Teachers

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Abstract

Sources of satisfaction, stress, and burnout are all-too-familiar to school-based agricultural education (SBAE) teachers. Yet, the current literature related to SBAE stress has not addressed the overwhelming existence of trauma in our greater society. Teacher wellbeing can be compromised when students share their own adversities and traumatic experiences, thus producing secondary traumatic stress (STS). To lay a foundation for inquiry, we used the Professional Quality of Life (ProQOL) survey and scale to quantify and draw attention to STS. In this study, we found early-career SBAE teachers (n = 49) in Oregon experienced moderate levels of STS along with STS being a significant positive predictor of burnout. Given our findings, we urge scholars and practitioners to recognize the implications student trauma has on the lives of teachers. Students carry invisible wounds to the SBAE classroom, which inextricably transfers to the teachers caring for them. Secondary exposure to trauma is salient to the experiences of teachers. Left unattended to, STS could result in severe implications for the individual as well as the profession.

Keywords: teacher stress; wellbeing; secondary traumatic stress; early-career teachers

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Introduction

Teaching is hard. The aggregate demands on teachers both internationally and domestically have stirred researcher inquiries as teachers voice the mounting pressures and scrutiny they face

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(Goldstein, 2015) as well as their feelings of responsibility for nearly everything interconnected to their students (Helker et al., 2018). Specifically, early-career teachers often face the added strain of being new to the profession. External stressors like managing parent interactions, administrative discrepancies, paperwork, and student discipline preoccupy their minds (Kyriacou, 2001; Lambert et al., 2011; Montgomery & Rupp, 2005). Teaching is not only hard, it is also one of the most stressful jobs in terms of both physical health and psychological well-being (Johnson et al., 2005). In school-based agricultural education (SBAE), teachers are familiar with these demands and maintain their own niche to address the diversity of tasks attached to the SBAE three-component model. The time commitments of the SBAE workload are unique, and the job is more than the actual act of instruction (Torres et al., 2008). The work hours of SBAE teachers are excessive and can be a deterrent to satisfaction (Hopkins et al., 2020), and often these hours exceed over 40 hours each week including duties such as FFA advisor, extended summer contracts, and supervised agricultural experiences (Sorenson et al., 2017). Research focused on SBAE teachers bolsters the aforementioned demands as well as the (in)ability to balance these staggering challenges between work and their personal lives (Traini et al., 2019; Traini, et al., 2020). The onset of the global COVID-19 pandemic and its lingering after-effects have further complicated the juggling act of roles and responsibilities and drastically changed the environment of instruction for SBAE teachers (McKim & Sorenson, 2020).

Of the list of challenges associated with SBAE, the particular variables of stress and burnout are prevalent in research conversations. Existing research has found SBAE teachers experience stress as they encounter classroom management challenges, struggle to manage their time, and develop curriculum competency (Mundt & Connors, 1999; Torres et al., 2008). At the same time, SBAE teachers are drawn to remain highly committed (Crutchfield et al., 2013) and, amid these stressors, they still experience feelings of accomplishment (Croom, 2003) staying in the profession because of the direct relationships involving students (Walker et al., 2004). Teachers want to “pay forward” their own positive experiences and “positively influence society” (Solomonson et al., 2019, p.121). The stressors and satisfiers encountered by SBAE teachers are a well-known issue and have been studied well over the last several decades (Barrick, 1989; Cano & Miller, 1992; Castillo & Cano, 1999; Chenevey et al., 2008; Croom, 2003; Kitchel et al., 2012; Smith & Smalley, 2018; Solomonson et al., 2019); however, none of these SBAE studies assessed how personal relationships with students heightens teachers’ exposure to their students’ traumatic histories and propagates secondary traumatic stress within SBAE. This is particularly salient today.

While teachers and researchers acknowledge the stress that comes with being an SBAE teacher, SBAE students also have their own stressors. Since teachers spend most of their day with students and forge psychological immediacy in their classrooms, they are bound to notice, and in some cases are mandated to report maltreatment (Crosson-Tower, 2003). Students carry emotions, invisible wounds, adverse childhood experiences (ACEs), and primary traumatic experiences throughout their lifetime and, inevitably, into the school environment (Felitti et al., 1998). Nearly two thirds of participants in a nationwide study reported the prevalence of at least one, and more than one-in-five reported three or more ACEs (Centers for Disease Control and Prevention [CDC], 2016), suggesting ACEs are far too common. According to the most recent survey, sixty-nine percent of children (ages 0-17) in Oregon had experienced one or more ACEs (Oregon Health Authority, 2016). Students may, for example, be traumatized through direct experience of sexual, physical or psychological abuse in addition to household challenges or neglect (CDC, 2016; Felitti et al., 1998). Compounding traumatic events can further complicate the wellbeing of students with mental health disorders, challenging socio-economic status or backgrounds of adversity, and may experience emotional challenges and academic struggles that are noticed by their teachers (Hydon et al., 2015). Such interactions between teachers and traumatized students can weigh on the teacher to the point of decreased well-being, burnout, and STS (Stamm, 2010). STS, first conceptualized

by Figley (1983), is the adverse emotional and psychological responses an individual, in a helping role, experiences as a result of interacting with those impacted by primary traumatic exposure. These helpers, like teachers, are drawn to do so because of the implied nature of caring for students. Consequently, the accumulation of exposure to individuals with traumatic experiences can result in the inability to express compassion, empathy or care. This is the cost of caring (Figley, 1995).

Trauma can transcend generations and communities just as much as it can alter the physiology and wellness of an individual across their lifespan; it is both contagious and disruptive with far reaching effects (CDC, 2016; Coddington, 2017; Pulido, 2012; Scott et al., 2013). If SBAE teachers are spending significant time teaching, helping and advising students through program-related activities, what are the impacts when some of these same students are disclosing their unsettling realities of traumatic experiences? These exchanges can result in STS, but SBAE literature has not focused on this line of inquiry. Addressing and isolating secondary trauma, as a stressor, is important to understand because transmission depends on a relationship between teacher and pupil, and this has not been part of the vocabulary of stress-related research in the field of agricultural education.

Kyriacou (2001) highlighted the need to investigate the “impact of teacher-pupil interaction and classroom climate on teacher stress.” (p.1). Understanding the connections between STS and SBAE will enable more appropriate interventions and support for impacted teachers’ wellbeing as well as their general practice in the classroom from a trauma-sensitive standpoint. More importantly, measures of stress and burnout need additional context as not purely being occupational, but also relational. Teaching and learning occur in a world where bad things happen. Therefore, the purpose of our study was to explore and legitimize the stress-related impacts of trauma, spreading between students and SBAE teachers in their early-career. Early-career teachers are more likely to leave the profession and therefore should be the focus of mentoring and specific professional development related to mitigating the effects of STS (Ingersoll, 2002). Early-career SBAE teachers are of particular interest because of the lack of awareness or preparation provided through higher-education institutions related to secondary stress, compassion fatigue and the development of self-care strategies at the pre-service level (Koenig et al., 2017).

Conceptual Framework

Conceptualizing and researching the impacts of trauma on the wellbeing of those in caregiving roles has been approached in a number of ways. For our study, we drew from the work of Figley (1995) and Stamm (2010), whose work in psychology has measured the professional quality of life of professionals, namely those in caregiving occupations. Figure 1 (below) illustrates a conceptual model of the Professional Quality of Life framework, which includes four main concepts: compassion satisfaction, compassion fatigue, burnout, and STS.

Figure 1

Diagram of Professional Quality of Life (Stamm, 2010).



Compassion satisfaction can be described as the satisfaction one derives from their work. Compassion satisfaction is akin to positive and invigorating feelings as a result of helping others. Individuals feeling compassion satisfaction reflect a desire to continue working where they are because of experiences of success, and hope for continuing to make a difference. In a giving role (e.g., teaching), satisfaction is found with “increases in happiness and subjective well-being”, and thus creates a “positive feedback loop” when focusing energy on helping others (Konrath, 2014, p. 399). In the context of Professional Quality of Life framework, SBAE teachers may experience compassion satisfaction when they witness student growth, learning, and achievement both in the classroom (e.g., concept mastery) and through program-related activities (e.g., a successful FFA meeting, engagement in a competition).

Compassion fatigue includes the negative feelings that result from work, specifically hopelessness and “difficulties in dealing with work or in doing your job effectively” (Stamm, 2010, p.13). This concept comprises two parts: burnout and STS. Burnout involves an individual's negative psychological state associated with their work including, “exhaustion; feelings of cynicism and detachment from the job; and a sense of professional inefficiency and lack of accomplishment” (Maslach & Leiter, 2016, p.89). Overarching burnout experiences are “gradual” such as an accumulation of workload expectations, diminishing support, or the loss of autonomy, and are often not marked by a singular event or experience (Stamm, 2010, p.13). In this study, we acknowledged burnout as adjacent to a helping occupation (i.e., teaching) that involves traumatized persons (i.e., students). We also recognize that burnout can proliferate into more serious decay of mental health and wellbeing because of the onset of traumatic stress (commonly secondary exposure) and the resulting unwanted intrusions.

Secondary traumatic stress is “the work-related, secondary exposure to people who have experienced extremely or traumatically stressful events” (Stamm, 2010, p. 13). The negative effects of STS include parallel responses to primary trauma exposure including intrusive imagery, avoidance, as well as sleep difficulties and avoidance of environments or individuals who trigger a reminder of the other person’s traumatic experiences (Bride et al., 2004). STS is an injury that occurs in a way not marked by physical recognition or visibility due to indirect exposure, nonetheless “simply learning about the traumatic events(s) carries traumatic potential” (Figley, 1995, p.22). Historically, research investigating the factors associated with stress has focused on the individual experiencing primary stressors or trauma. However, Figley (1983) reported that caregivers of survivors of catastrophe such as war, sexual violence, or unemployment are emotionally drained and “adversely affected” because of their interactions (p. 12).

In our study, we operationalized these concepts within the context of SBAE whereas individual SBAE teachers can experience varying levels of compassion satisfaction and compassion fatigue while engaging in their work. Below is an example of how these concepts might manifest for a teacher in the context of SBAE. Following a winter break, an early-career teacher is preoccupied with the logistics and management of being absent for multiple days for an upcoming series of FFA competitions. The amount of time investment, and the feeling of an absence of support from their administration, could be emotionally exhausting (burnout). Later, the same teacher, while having conversations with students and building relationships at an FFA event, might learn of an unsettling reality about one of their students such as being abused by a parent. Now the teacher is tasked not only with maintaining the demands of their students on this field trip, but the safety of a specific student, filing a mandated report, and the implications of that same student returning home (STS). The combination of stressors (burnout and STS) begins to consume the entirety of the teacher to the point of apathy, and the overwhelming feeling of worthlessness to their students and school community (compassion fatigue). The thought of returning to their job is haunting, and the expectations of their job seem impossible. At the same time, that same teacher

could find a strong sense of purpose and compassion satisfaction from working with their students, despite the challenging work environment. The preceding incident does not detract from the wellbeing of the teacher, but rather they feel empowered to act on behalf of the student and return to their classroom invigorated because of the important role they have played in supporting a student in desperate need. The relationship between burnout and STS are indicators of compassion fatigue, so in respect to the overall stress and burnout literature in SBAE, we recognize the lower, left portion of Figure 1 as central to our study.

Purpose

The purpose of our study was to describe the STS levels of early-career SBAE teachers. This study was part of a larger investigation that explored the various factors attributed to a professional quality of life. With this knowledge, we aimed to understand the relationship between STS and burnout in order to explore the phenomena of compassion fatigue in future inquiry. Two research questions guided our study:

1. To what extent are SBAE teachers in Oregon experiencing STS and how is this represented across demographics?
2. What is the relationship between burnout and STS?
 - a. *H_a: There is a positive relationship between STS and burnout levels of early-career SBAE teachers in Oregon.*

The purpose guiding this study align with AAAE Research Priorities four and six, which acknowledge the adversities experienced by students and calls for research to address the evolution of these needs, as well as cultivating resiliency in agricultural educators. (Roberts et al., 2016).

Methodology

This study aimed to describe the STS levels of early-career school-based agriculture (SBAE) teachers as well as the relationship between burnout and STS. Both descriptive and correlational quantitative approaches were selected for analysis. Limitations of resources and time resulted in non-probability sampling which can still be a viable option for inference when conclusions are made only about the specific data sample (Elliott & Valliant, 2017). The target population was all early-career SBAE teachers in Oregon. To accomplish this purpose, data were collected from Oregon early-career SBAE teachers ($n = 55$) at the Oregon Early-Career Teacher Workshop held in partnership with Oregon State University and the Oregon Agriculture Teachers Association. Forty-nine chose to participate in the study, which resulted in an 89% response rate. For the purposes of this study, early-career will be defined as an individual that self identifies as a SBAE teacher with experiences accumulating to less than eight years. Teachers in this study may have teaching experiences exceeding our definition of early-career teacher because of an alternative route to certification such as teaching another subject prior to achieving licensure in agriculture education. Still, if the individual teacher's experiences teaching SBAE were less than eight years, they were included in this study. This population was selected for convenience given the timing of the Early-Career Teacher Workshop. Additionally, the population was selected to explore indicators of STS. Secondary traumatic stress, alongside the accumulation of burnout symptoms, can yield negative ramifications such as compassion fatigue (Hydon et al., 2015; Ingersoll, 2002; Solomonson et al., 2019; Thieman et al., 2012; Torres et al., 2009).

The Professional Quality of Life (ProQOL) scale was used to measure STS and burnout, notably because of its construct validity in over 200 other studies (Stamm, 2010). Additionally, the

relationship between STS and burnout was explored to dig deeper at the phenomena of compassion fatigue. The Professional Quality of Life Scale (ProQOL), originated as the Compassion Fatigue Self-Test through the work of Figley (1995), but was eventually revised through the collaborative work of both Figley and Stamm who suggested the addition of the concept of compassion satisfaction (Stamm, 2010). We adapted questions from the existing ProQOL scale to support our research objectives, which resulted in a 49-item questionnaire. Cronbach's alpha reliability coefficients for the constructs were acceptable and ranged between .75 and .88 (Stamm, 2010).

Thirty questions from the existing ProQOL scale were used at the onset of the survey. The questions in ProQOL are explicitly stated for helping professions, but to avoid confusion among the participants the questions were modified. The word "help" or "helper" was substituted with "teach" and "teacher" with permission from The ProQOL Office at The Center for Victims of Torture. The first section of the questionnaire utilized the most recent version of the ProQOL (Stamm, 2010) to determine the differences between the three constructs of compassion satisfaction, STS and burnout. From the 30 questions, 10 statements were explicitly linked to each of the three constructs, providing the final scale score for each construct. Respondents selected their responses to each of the 30 statements on a five-point scale (i.e., 1 = *never* to 5 = *very often*). Additionally, respondents were instructed to select the number that reflected how frequently they experienced the responses considering the most recent 14 days of teaching. Statements were both positive and negative in nature; therefore, reverse coding was necessary for final interpretation. The burnout scale was the only portion of this questionnaire that required reverse coding.

The last section of the questionnaire included nine demographic questions for the purpose of enhancing analysis and describing the population of this sample. Demographics collected included: name, age, gender identity, ethnicity, years in education career, years in current position, state they teach in, current school district, and if the individual has ever completed a mandated report. None of these questions were required, and they were delivered after the completion of the 30 ProQOL questions. Survey participants were encouraged but not required to include their first and last name to facilitate the secondary purpose of the survey which included a workshop the next morning. A personalized report and interpretation narrative for the relative score of each construct (compassion satisfaction, burnout, and STS) was provided to all that both completed the ProQOL section of the survey and included their name as an identifier. Existing materials from *The Concise ProQOL Manual* (2010) were used to ensure alignment of interpretation.

After the Institutional Review Board approved the study, the data collection took place at the Early-Career Teacher Workshop at Oregon State University in February 2020. Also, the ProQOL Office at The Center for Victims of Torture granted permission to use the ProQOL in January 2020. This instrument was adapted to be delivered in an online format to facilitate a more secure and efficient data entry process. All surveys were administered electronically and to the entire group simultaneously. The data were collected using the secure online survey provider Qualtrics, and teachers accessed the survey either by entering a URL or scanning a unique QR code. Prior to attending the two-day conference, participants were provided with a description of the intended study. In addition, there was a follow-up workshop to facilitate the interpretation of the ProQOL. Participants had the freedom to withdraw from participation at any moment. Last, the data was de-identified, imported into Statistical Package for Social Sciences (SPSS) Statistics 26 and analyzed using descriptive and parametric inferential statistics (Creswell & Creswell, 2018).

Findings

Description of the STS levels of early-career SBAE teachers in Oregon

After analyzing the responses, we found that on average, more than half of the early-career SBAE teachers in Oregon experienced moderate STS levels ($M = 25.65$, $SD = 5.57$). The rest of the participants in this study presented low STS levels ($M = 25.65$, $SD = 5.57$), and none indicated high STS levels. Cronbach's alpha for STS items from the respondents maintained internal consistency and were acceptable ($\alpha = .80$) (Taber, 2017). Table 1 (below) shows the representative means from our sample.

To gain familiarity with the population impacted by STS, we further analyzed the frequencies and means, as well as categorized the levels of STS by demographic information, including their gender, age, race/ethnicity, total years teaching in education, years teaching in current position, and if they had ever completed a mandated report. Table 2 (on next page), details the complete breakdown of the connections between demographics and mean STS levels. According to our results, there were 35 females (71.42%), and they indicated higher mean STS levels ($M = 26.57$, $SD = 5.42$) than males ($M = 23.54$, $SD = 5.65$). At the same time, 71.43% of women reported they were experiencing moderate levels of STS, compared to half of the men.

Table 1

Mean STS Levels of Oregon Early-Career SBAE Teachers (n = 49)

Construct	Level	<i>M</i>	<i>SD</i>	<i>f</i>	%
STS		25.65	5.57		
	Low ^a			16	32.65
	Moderate ^b			33	67.35
	High ^c			--	--

^a Low level of STS (22 or less). ^b Moderate level of STS (23-41). ^c High level of STS (42 or more).

Forty-four participants (89.79%) indicated they were White and reported an average STS level in the moderate range ($M = 25.27$, $SD = 5.24$). Mean STS levels of their Hispanic or Latino and multiracial colleagues, in stark contrast, were higher by nearly 5.0 units. As noted, one of the participants did not report their race/ethnicity, in addition to their gender or age. The ages of our participants were categorized into generation groups, and 21 of the teachers (42.85%) were part of Generation Z (1995-2012). Teachers born into Generation Y (1980-1994) reported the highest mean STS levels ($M = 27.22$, $SD = 5.35$), and the smaller population of Baby Boomers (6.12%) reported on the lower end of STS levels with far less variability ($M = 23.67$, $SD = 0.58$). In summary of this demographic, it is worth mentioning that the majority of teachers in all age groups fit within the bounds of moderate STS levels.

To determine the range of experiences among early-career teachers, we collected information about their total years in the profession as well as current positions. We found that most of the respondents had less than three years in the profession and in their current positions (40.81-51.02%). What is clearly seen in Table 2 is the general pattern of increasing STS levels among teachers between the beginning of their career and fifth year. All of teachers with between three and five years of experience are reporting moderate levels of STS ($M = 29.20 - 30.00$). The

sheer drop in average STS levels, in comparison to more seasoned teachers with more than five years, is intriguing. On average, teachers who have not even completed a full year teaching in total ($M = 22.73$, $SD = 4.78$) or at their existing position ($M = 22.00$, $SD = 5.00$) are the only demographic with borderline low STS levels. In fact, this is one of the few points of data from our sample where a greater percentage (53.33 - 54.55%) were experiencing low STS levels than moderate.

Table 2

Demographic Information of Participants Including Mean STS Levels (n = 49)

Demographic	M^a	SD	f	%	Low STS		Moderate STS		
					f	%	f	%	
Gender									
Male	23.54	5.65	13	26.53	6	46.15	7	53.85	
Female	26.57	5.42	35	71.42	10	28.57	25	71.43	
Did Not Respond	19.00	--	1	2.04	1				
Race/Ethnic									
White	25.27	5.24	44	89.79	6	36.36	28	63.64	
Hispanic or Latino	33.0	--	1	2.04	--	--	1	100.00	
Two or More Races ^b	30.33	8.96	3	6.12	1	33.33	2	66.67	
Did Not Respond	19.00	--	1	2.04	1				
Generation^c									
Generation Z	24.95	5.64	21	42.85	9	42.86	12	57.14	
Generation Y	27.22	5.35	18	36.73	5	27.78	13	72.22	
Generation X	25.17	7.44	6	12.24	2	33.33	4	66.67	
Baby Boomer	23.67	0.58	3	6.12	--	--	3	100.00	
Did Not Respond	19.00	--	1	2.04	1				
Years Teaching^d									
$x < 1.0$	22.73	4.78	11	22.44	6	54.55	5	45.45	
$1.0 \leq x < 3.0$	25.40	4.85	20	40.81	7	35.00	13	65.00	
$3.0 \leq x < 5.0$	30.00	4.12	11	22.44	--	--	11	100.00	
$5.0 \leq x$	24.14	7.38	7	14.28	4	57.14	3	42.86	
Years Teaching in Current Position^e									
$x < 1.0$	22.20	5.00	15	30.61	8	53.33	7	46.67	
$1.0 \leq x < 3.0$	27.20	5.24	25	51.02	6	24.00	19	76.00	
$3.0 \leq x < 5.0$	29.20	4.44	5	10.2	--	--	5	100.00	
$5.0 \leq x$	24.50	5.69	4	8.16	3	75.00	1	25.00	
Mandated Report Completion, at least Once									
Yes	27.33	4.45	15	30.61	3	20.00	12	80.00	
No	24.91	5.91	34	69.38	14	41.18	20	58.82	

^a Low level of STS (22 or less), Moderate level of STS (23- 41). ^b Native Hawaiian & White ($n = 2$), Black, Hispanic or Latino & White ($n = 1$). ^c Gen Z (DOB 1995-2012), Gen Y (1980-1994), Gen X (1965-1979), Baby Boomer (1946-1964). ^d “x” represents the individual respondents’ years teaching.

Information was collected to determine whether or not the respondents have completed a mandated report. Most of the participants said no (69.38%). Upon closer inspection of the 15 teachers who have completed a mandated report, the differences in their levels of STS are explicit ($M = 27.33$, $SD = 4.45$), and the vast majority (80.00%) are in the moderate range.

Relationship between burnout and STS levels of early-career SBAE teachers in Oregon

Hypothesis_a: There is a positive relationship between STS and burnout levels of early-career SBAE teachers in Oregon.

For the purposes of exploring research question two, and the corresponding hypothesis, a one tailed, bivariate correlation was used. Spearman’s rho (r_s) was used for interpreting the correlation coefficient. We hypothesized a positive relationship would be observed between burnout and STS. The results indicated the linear relationship was positive and demonstrated a “strong” (Dancey & Reidy, 2007) correlation with statistical significance ($r_s = .70$, $p < .001$).

A simple linear regression was conducted to predict burnout levels based on STS levels. We found a significant regression equation [$F(1,47) = 44.88$, $p < .001$] with an R^2 adjusted of .48. Our analysis indicates that approximately 48% of the variance in burnout is explainable by the independent variable, STS (see Table 3). The model suggests as the level of STS experienced by teachers increases so too will the subsequent levels of burnout ($\beta = .699$, $p < .001$).

Table 3

Regression Analysis Summary for STS Predicting Burnout ($n = 49$)

Variable	B	β	CI Lower Bound	CI Upper Bound	p
(Constant)	12.48	--	7.96	16.97	<.001
STS	.57	.699	.40	.75	<.001

Note. R^2 adjusted = .48, CI = 95% Confidence Intervals for B

Conclusions and Recommendations

Prior to discussing the implications of this study, it is important to address its limitations. The small sample size of our study leads to inference and predictive power useful only to these participants. In future research, expanding the overall population of respondents will provide more comprehensive insight on the pervasiveness of secondary traumatic stress experiences across SBAE. Further, these data were collected prior to the COVID-19 pandemic, which has since complicated teaching and learning. To be more comprehensive, the ProQOL should be administered multiple times throughout the year to reflect responses to situations (e.g., following State FFA Conventions, responses to interventions, or before a winter break). Data collection timing can influence the type of responses received due to the cyclical demands of teaching throughout a regular school year, which can lead to burnout (Lopez et al., 2019). Nonetheless, our study is, to our knowledge, the first of its kind in SBAE. The following sections expand upon the importance of these findings as well as offer a series of implications and recommendations for future inquiry.

Research Question #1

Two-thirds of the teachers in our study indicated a moderate level of STS ($M = 25.65$, $SD = 5.57$). The commonality of this level of STS evidences the pervasiveness of trauma and adverse childhood experiences. The teachers in this study were at the onset of their teaching career, which implies the manifestations of these traumatic experiences can start early and coalesce over time. Our findings also suggested a higher degree of STS when compared to a survey of school personnel, which was the first known collection of data in educational settings (Borntrager et al., 2013). These secondary stress reactions are hazardous, exhausting, and adversely affect wellbeing (Figley, 1983; Figley, 1995; Stamm, 2010), and our early-career SBAE teachers are noticing it within themselves. The finding that all teachers working between three and five years in total or for the same school district reported moderate levels of STS is striking. Further, we notice increasing levels in STS until teachers reach their fifth year of teaching. A key marker of the lowest reported STS levels was those teaching less than one year. It is difficult to explain this synchrony of results, but it might be related to the shifting priorities after surviving the first year of teaching and begin to personally take root into their school, community, and lives of their students.

Our findings were similar to a 2011 report indicating that females generally are at a greater risk for STS (National Child Traumatic Stress Network, 2011). Elevated levels of STS was also evident among teachers who have conducted at least one mandated report. These results spark some questions: In our profession, do SBAE teachers bear witness to the adversities of their students while conducting supervised agricultural experience visits or the occasion of FFA officer retreats? Conducting a mandated report can produce negative emotional consequences, and as a byproduct of conducting this crucial process SBAE teachers are experiencing the repercussions. Are supports built into the procedures of reporting suspected neglect or abuse? We need to collect data to further distinguish if mandated report experiences have a relationship to the wide variety of work-related demands unique to SBAE. Attention should be directed to inseparable, intersecting social identities of the teacher and pupil, both of which influence how, when, where, and what sensitive information such as personal trauma might be disclosed. Borntrager et al. (2003), too, emphasized the importance of identity, marginalizing factors, and in particular the personal trauma histories of the participants.

While it is a relief the typical early-career SBAE teacher is not at a high risk for STS, we recommend the investment in practices to create awareness, support and interventions to lower these levels instead of triaging educator wellbeing in overwhelming numbers. We recommend using the ProQOL to compile data from all SBAE teachers who are pre-service, early, mid and late-career, and thus create a more comprehensive picture of wellbeing in the profession.

To further explore the phenomenon of STS in teachers, we recommend actions that facilitate professional development, support and additional research. State and national SBAE organizations can play a vital role in generating more awareness of teacher wellbeing by hosting workshops to equip teachers with strategies for recognizing and responding to their own manifestations of STS. Additionally, we recommend a qualitative research approach to capture SBAE themes on STS, and the personal histories of SBAE teachers (Caringi et al., 2015). Understanding the thematic experiences of teachers across all levels of STS could open the door to facilitating more productive interventions and professional development for the amelioration of health. Creating space for SBAE teachers to verbalize or narrate their experiences would bridge research and coping together with the beneficence of teachers as a positive outcome. This entire process should be approached delicately because of the overall stressful, and potentially triggering nature of discussing traumatic experiences.

Research Question #2

We found a significant relationship between respondents' STS levels and their burnout level. As teachers experience more STS, this adds to their likelihood of burnout. Consequently, these findings provide sufficient evidence to accept our hypothesis pertaining to the positive, linear relationship between STS and burnout with these early-career SBAE teachers in Oregon. This relationship, when experienced at high levels results in an individual being prone to compassion fatigue. Therefore, we also conclude that based on the observed moderate risk levels of burnout and STS in this study, the respondents are likely to experience compassion fatigue in the future if current stressors remain constant or increasing.

Given the correlation and predictive power of STS for early-career teachers to burnout, there may be major consequences which follow for their personal well-being, career and the SBAE profession as a whole. Our study, unlike any literature pertaining to SBAE, substantiates that STS is something that is experienced by teachers in SBAE. Figley (1995) made it clear that when an individual experiences higher levels of STS and burnout, they are likely on a path to feeling the costs of caring, known as compassion fatigue. The destination is harmful. The ongoing impacts of the COVID-19 pandemic on educators have increased the likelihood for burnout and traumatic exposure (Brunzell et al., 2021). Because of our direct access to working with this sample, we find the model important for informing our future professional development of teacher candidates and early-career teachers, particularly through trauma-informed practices to enhance wellbeing (Castro Schepers & Young, 2021). We invite scholars, teacher educators, and others involved in SBAE to include topics of trauma and secondary exposure to trauma in their conversations and research about burnout and teacher turnover.

Implications

We now know the majority of teachers in our study have experienced STS. Can they bounce back? Identifying coping strategies and the development of resiliency are key to future success, retention and mental health of these teachers (Thieman et al., 2012), and a trauma-informed approach strengthens these outcomes (Goodman, 2017). When added to the undergraduate curriculum, the acknowledgment of trauma creates a more universal understanding and awareness (Elmherst et al., 2018). Mundt and Connors (1999) indicated classroom management and student discipline as primary stressors during the first years of teaching SBAE. It is unclear, however, if this conclusion applies to the proliferation of student behavioral responses as a result of adverse childhood experiences. At the same time, we know trauma impairs the behavioral regulation of students (Hydon et al., 2015), and a student with four or more ACEs is over 32 times more likely to struggle academically and be labeled as a disciplinary problem than a student with no record of ACEs (Scott et al., 2013). The SBAE literature has labeled students for their behaviors instead of focusing attention on the reason behind their behaviors, thus absent of a trauma-informed approach, or Contemporary Trauma Theory (Goodman, 2017). Through a new lens, students are seen as living through difficulties instead of being stamped as difficult. Entering this paradigm shift and theoretical approach will take a concerted effort, but just because this is challenging does not mean it is not worth pursuing.

Agricultural education majors and preservice teachers are perceptive and concerned about the variety of challenges and the role they intended to fill before even graduating (Roberts et al., 2020; Smalley & Rank, 2019; Thieman et al., 2014). This makes us wonder if they are attuned to the footprint of trauma on their personal and students' well-being. Trauma-sensitive educational practices should be part of preservice teacher induction (Brunzell et al., 2021) and made part of the research priority conversation of SBAE. Foundational themes to address through teacher education

related to trauma-informed frameworks include increasing awareness and recognition of the social and emotional impacts of adversity as well as linking these conceptual understandings to practice through responsive pedagogies that resist re-traumatization (Brunzell et al., 2021; Center for Substance Abuse Treatment, 2014). Trauma is rampant, and a legitimate variable affecting teaching and learning, however, there is limited attention in SBAE research on the relationships between stressors and traumatic exposure. Understanding these relationships could be powerful in developing both trauma-informed practices, and coping strategies for wellbeing enhancement among all SBAE teachers, especially those at the onset of their career. In SBAE, teachers deserve attention and allocation of resources to be seen and heard in this light. As far as our own study illustrates the levels of STS are concerning, yet are not beyond prevention or reduction.

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