

Original Research

## Influence of Teachers' Secondary Traumatic Symptoms on Their Burnout, Compassion Fatigue, and Intentions to Resign in Low Socioeconomic Status Schools

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### Abstract

The current study explored the adverse outcomes of secondary traumatic symptoms experienced by secondary school teachers on their compassion fatigue, burnout, sense of satisfaction, and intention to resign from the teaching profession in low SES schools in the United States context. The study was inspired by Ludick and Figley's *Compassion Fatigue and Resilience* model and Figley's work on *Compassion Fatigue*. A non-experimental design was employed, and data were gathered from a random sample of 131 teachers. The data-gathering instrument was an online questionnaire featuring validated measures, including the *Secondary Traumatic Stress Scale* (STSS) and the *Professional Quality of Life Scale* (PQLS). ANOVA and regression analyses were conducted to analyze the data. The findings of the study revealed a significant relationship between teachers' experience of secondary traumatic symptoms and the measured outcomes, including compassion fatigue, burnout, and intention to resign from the teaching profession. The findings also revealed a statistically significant difference between novice and veteran teachers in secondary traumatic symptoms, burnout, and intentions to leave the profession. The findings underscored the necessity for targeted



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support programs aimed at assisting educators who encounter secondary traumatic symptoms while working with students affected by adverse childhood experiences in low-socioeconomic school settings. The study would contribute valuable insights into the nuanced challenges faced by teachers working in low-socioeconomic schools as it highlighted the need for proactive support mechanisms, professional development initiatives, and tailored interventions in these school settings. The findings also call for a shift in the education landscape toward prioritizing teacher well-being, fostering resilience, and creating supportive work environments.

### **Keywords**

Secondary traumatic symptoms; compassion fatigue; burnout; sense of satisfaction; intention to resign; low SES schools; teachers

## **1. Background of the Study**

Teachers undoubtedly influence student learning the most [1]. According to Beusaert [2], how a teacher stimulates a student to connect to the learning and construct deep meaning from it is essential to how teachers can influence student learning outcomes. It is particularly important that teachers use a student-centered approach when guiding students to make the content meaningful. If teachers do not use this approach to influence student learning, students will likely have only a surface level of understanding and memorize information rather than acquire meaning and understanding. The strategies that teachers use may shape the type of learner the student will become. Their passion for the content and their interactions with their students may play an important role in student learning outcomes.

Public schools in the United States, especially in communities with low socioeconomic status (SES), have been experiencing a shortage of certified teachers for disadvantaged children. The demand for certified teachers far exceeds the supply of qualified education graduates entering the workforce [3]. Thus, when non-certified and non-qualified teachers teach students, students may experience learning deficits. In 2021, 3,842,796 teachers were employed in the United States, and the number of job openings during the same year was 71,918 [4]. The data indicate that a considerable number of students are not receiving educational content delivered by certified educators in the United States. The National Center for Education Statistics [5] indicated that 50% of the vacancies result from teacher resignations, not retirement. The Center for Education Recruitment, Retention, and Advancement [6] reported that approximately 6,000 teachers left the profession in 2020, and in South Carolina alone, the number of K-12 public school vacancies in the same year was 700 [7].

Sutcher and colleagues [8] stated that when “compared to high-achieving jurisdictions like Finland, Singapore, and Ontario, Canada—where only about 3% to 4% of teachers leave in a given year—U.S. attrition rates are quite high, hovering near 8% over the last decade, and are much higher for beginners and teachers in high-poverty schools and districts” (p. 25). A gap analysis showcasing the supply of available teachers versus the demand of teachers required starting from 2005 and ending in 2025 is steadily increasing [9]. After 2013, the gap widened drastically. By 2025, the

projections for the estimated teacher supply are close to 200,000, and the estimated demand for teachers is slightly over 300,000 [10].

With only a third of the teaching population returning to the classroom, states, districts, and schools must reinvest resources to train and retain new teachers [8]. According to The Learning Policy Institute [11], districts spend approximately \$20,000 yearly for every new teacher. The allocation of these funds and the time it takes for schools to train new professionals take away from teaching opportunities where a proficient and effective educator could be working with students. These funds could be allocated to professional development resources for teachers.

Considerable research has been conducted regarding why teachers leave the profession. For example, Loewus [12] stated that “8% of teachers leave the profession every year, and 84% report that teaching has been more stressful since the pandemic” (p. 7). According to Simon and Johnson [13], teachers leave the profession because working conditions in the school setting hinder them from their desired teaching goals. The authors further referenced various studies that confirm that teacher turnover is particularly high in low-SES schools because teachers prefer to leave economically disadvantaged students and work with wealthier students due to low levels of enjoyment and decreased employee satisfaction in low-SES schools. Finally, poor working conditions may also lead to teacher burnout.

The current study examined whether secondary traumatic stress (STS) may have any significant influence on teachers’ compassion fatigue (CF), burnout (BO), sense of satisfaction (SOS), and intention to resign (ITR) from working in low SES schools. Secondary traumatic stress is a secondary condition resulting from a person learning about the details of a traumatic event experienced by someone in their care [14]. Newell and MacNeil [15] defined burnout (BO) as a progressive state where factors influence the individual, the population they serve, and the organization, leading to emotional exhaustion, depersonalization, and a reduced SOS. A sense of self-satisfaction is described as a set of favorable or unfavorable feelings or emotions about one’s personal or professional life [16]. These three factors leading to BO result from consistently serving a high-needs population, detachment resulting from acquired cynicism over time, and feelings of inadequacy when failing to help a high-needs population [15]. According to Ludick and Figley [17], burnout can lead to CF, which can develop from STS. Compassion fatigue refers to the emotional and physical exhaustion that occurs over time when a person or persons working with individuals in crisis and experiencing traumatic events begin to experience stress and a lack of drive to continue helping those in need [18].

One of the factors contributing to teacher BO that has recently gained researchers’ interest is how STS are transferred from students to educators and subsequently influence educators’ decisions to remain in a particular school and the teaching profession. Secondary traumatic symptoms are defined as undesirable outcomes from an individual’s emotions being negatively influenced as a result of working with a person experiencing traumatic events [17]. Ormiston and colleagues [14] reported that teachers experience higher behavioral, psychological, and physiological symptoms from work-related stress. These conditions may lead to undesirable psychological and physical conditions for teachers. Figley [18] recommended further research to determine how the cost of caring too much for students in crisis, which leads to STS, might contribute to outcomes such as CF, BO, poor SOS, and ITR from the teaching profession.

While the issues of teacher retention and secondary trauma may be relevant in any school context, the situation in high-poverty and low-achieving schools is particularly dire. Ormiston and

colleagues [14] reported that 50% to 60% of children experience at least one ACE, and children who experience at least one ACE display significant behavioral, socio-emotional, and academic challenges in the classroom. A lack of formal training on how to work with children who consistently experience ACEs can exacerbate STS for educators. Secondary traumatic symptoms from the consistent trauma that their students endure may influence a teacher's decision to remain working in the classroom. In high-poverty and low-achieving schools where students with traumatic experiences have indirectly influenced the way teachers think, feel, and act by transferring their trauma, exposure to STS is especially important [19]. Vicarious traumatization (VT) "occurs when teachers essentially 'take on' their students' traumatic experiences and internalize their students' experiences with trauma" [20]. Traumatization may lead to connections and detrimental self-deprecating internalizations, which may cause additional stress on educators.

Students in these low-SES communities experience traumatic events on a more frequent basis [21]. According to Paccione-Dyszlewski [21], "10 million children live in communities deemed unsafe, 16 million children belong to families with income levels that fall below the federal poverty line, and up to 10 million children witness interpersonal violence annually" (p. 8). Such traumatic experiences endured by students can cause negative behavioral effects, which make them prone to violence and cause mental health issues that may lead to school infractions [22]. Working with these children daily may affect teacher morale, increase BO and stress, and lead to teacher turnover in an organization [19]. A continuous cycle of organizational dysfunction in a school may cause both novice and veteran teachers to leave the profession. Eyal and colleagues [20] stated that students with adverse childhood experiences (ACEs) often lack the resources to seek clinical or professional treatment. This lack of resources tends to influence the teachers directly working with these students, and these teachers often must support students in crisis.

While relevant studies in the literature tend to focus on working conditions and school environments as contributing factors to teachers' SES, a limited number of studies also examined whether teacher-specific attributes such as their gender and tenure (i.e., years of work experience) also influence their CF, BO, SOS, and ITR. For instance, Burnett and Wahl [23] found that gender, age, and tenure were significant factors that can exacerbate BO. Similarly, Hester et al. [24] found that demographic variables such as age, gender, level of certification, and years of teaching experience are predictive variables that may lead to the development of STS, CF, BO, and low satisfaction. The individual demographic attributes of teachers, such as their gender and work experience, would further complicate their coping with STS and its outcomes. Mason-Williams et al. [25] pointed out the comparable STS experiences between male and female teachers working in low-SES schools. According to Westover [26], potential explanations for the differences could involve societal gender norms influencing job perceptions or workplace dynamics as it relates to equal pay, promotional advancements, and opportunities for professional development. In a female-dominated profession, it would be worthwhile to examine whether female teachers may experience unique differences from their male counterparts in managing SES and its outcomes, including STS, CF, BO, and low satisfaction.

Staffing in low-SES inner-city schools is particularly challenging, given that teacher turnover is higher in the first five years of teaching. According to Mason-Williams et al. [25], novice teachers experience added pressures such as developing instructional skills, learning about the school community, and accessing. It becomes a revolving door for new employees to fill vacant positions until one decides to stay. It has been reported that new educators are prone to more stress and

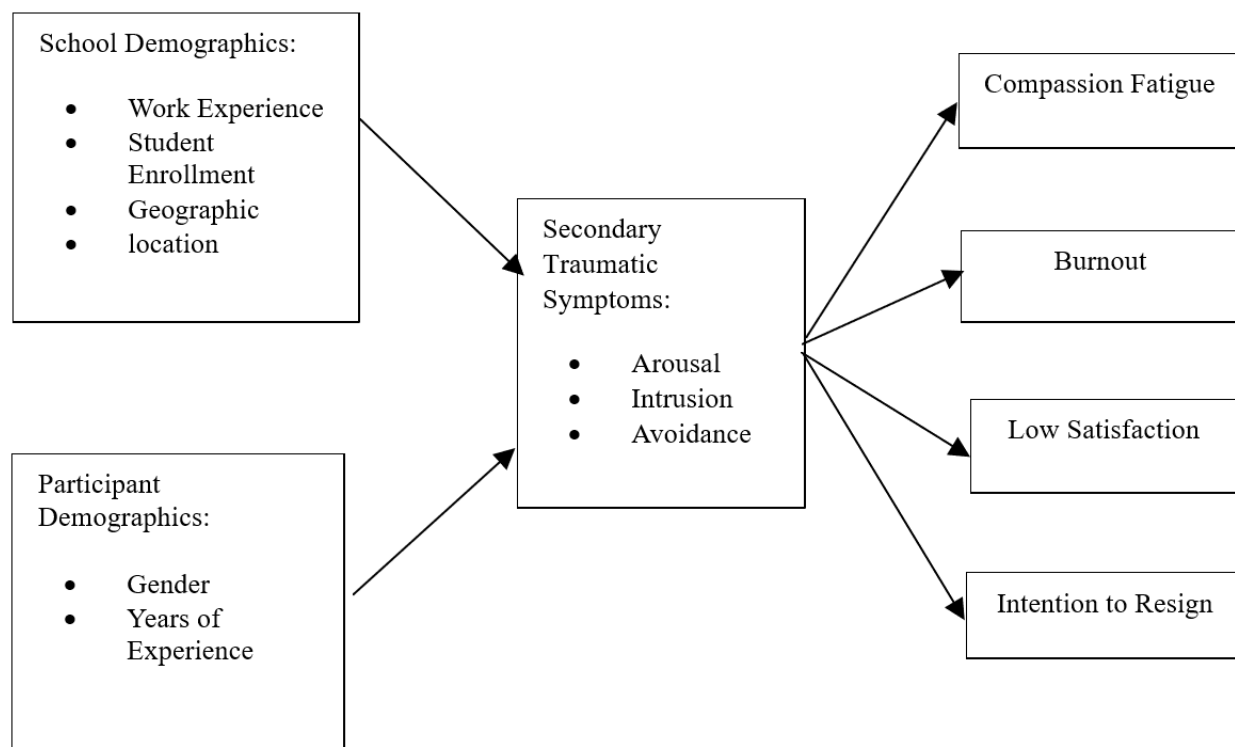
higher BO in the first five years of teaching [24]. According to Ludick and Figley's [17] CFR model, a poor SOS correlated with a lack of social support, exposure to prolonged student suffering, life demands, and empathic concern/responses are all connected with exposure to STS. Hester et al. [24] noted that if novice teachers are inexperienced and do not feel supported, they will likely resign within their first five years of teaching. Research also suggests that attrition in Title I schools is 50% higher than in non-Title I schools and 70% higher in schools serving the most students of color versus serving the fewest [27].

The purpose of this study was threefold. First, it examined whether STS significantly influenced teachers' CF, BO, SOS, and teacher ITR from working in low-SES schools. The study also aimed to investigate whether there was a statistically significant positive correlation between STS and the development of CF, BO, and the ITR from the profession before retirement age for teachers working in low SES schools. Finally, the study sought to determine if there is a statistically negative association between STS and SOS when working in low-SES schools. Examining the influence of STS transferred from students to teachers in high-poverty communities is important because these experiences can negatively influence teachers' desire to leave the profession [23]. The results from this study could contribute to the literature on STS as a predictor of teachers' intentions to leave the profession before retirement age in low-SES schools.

## **2. Theoretical Framework**

The current study adopted Ludick and Figley's [17] compassion fatigue resilience (CFR) model, which is an updated version of Figley's compassion fatigue model. Compassion fatigue is defined as normal behavior and emotional response associated with the desire to help those experiencing stress or trauma [23]. It can develop after one encounter with an individual who is experiencing trauma or is in crisis. The CFR model postulates that a long period of imbalanced accumulation of negative energy without positive experiences is detrimental to the individuals' well-being and increases their STS. Figley [18] defined CF as normal behavior and emotional response associated with the desire to help those experiencing stress or trauma.

Although Ludick and Figley's conceptual model encompasses a broader range of additional constructs, this current study focused specifically on STS and how it correlates with CF, BO, and a teacher's SOS. Secondary traumatic symptoms were assessed through three dimensions: arousal, intrusion, and avoidance, as depicted in Figure 1 below. The CFR framework informed the research questions and served as the basis for identifying the specific variables and outcomes worth investigating regarding the influence on the intention to resign from the teaching profession.



**Figure 1** Conceptual Framework: Influence of teachers’ secondary traumatic symptoms on their compassion fatigue, burnout, low satisfaction, and intentions to resign.

As demonstrated in Figure 1, the study also paid special attention to the potential influences of several demographic attributes of teachers. More specifically, the study examined whether teachers’ gender and work experience influence their STS, CF, BO, and satisfaction. Rankin [19] suggests that factors such as gender and years of experience may contribute to STS susceptibility. Furthermore, teaching at a school where a high percentage of students have experienced trauma can increase teachers’ vulnerability to STS exposure. To measure the influences of STS on CF, BO satisfaction, and the ITR from the profession, this study employed a questionnaire that included questions from both the STSS developed by Bride et al. [28] and an adapted version of the ProQOL developed by Stamm [29] to measure STS, CF, BO, and satisfaction. Additional questions were added to the questionnaire to measure the intention to leave the profession.

### 3. Research Questions

This study attempted to answer the three research questions listed below regarding whether STS may significantly influence teachers’ CF, BO, sense of satisfaction, and intention to resign from the profession in low SES schools.

1. After controlling the demographic attributes pertaining to participants and their schools, to what extent do secondary traumatic symptoms predict the levels of compassion fatigue, burnout, sense of satisfaction, and intention to resign among teachers working?
2. To what extent do secondary traumatic symptom outcomes of compassion fatigue, burnout, sense of satisfaction, and the intention to leave the teaching profession have a statistical difference between novice and veteran teachers?

Is there a statistical difference between male and female teachers in their experiences of secondary traumatic symptom outcomes of compassion fatigue, burnout, sense of satisfaction, and the intention to leave the teaching profession?

#### **4. Research Design and Methods**

This section comprises research design, sample, measures, and data analysis sub-sections.

##### **4.1 Research Design**

A quantitative causal-comparative research design was employed to examine the relationships between the study variables. The causal-comparative design allowed researchers to examine the relationship between the study variables without manipulating the independent variables, STS, CF, BO, and LS [30]. It also allowed researchers to compare the relationships between groups, such as seasoned and novice teachers, by controlling other plausible variables. Time-wise, the study employed a cross-sectional design where data were gathered at one point in time.

##### **4.2 Ethics Statement and Participants**

An Institutional Review Board approval (FY 22-23-373) was obtained from Arkansas State University to ensure the ethical standards were followed and met. The participants' consents were secured, and other ethical procedures, such as anonymity, were followed. The questionnaire was distributed to teachers in the selected schools who met the specified criteria and consented to participate in the study. An email was sent to the designated faculty at these schools, outlining the purpose of the study and inviting them to complete the questionnaire. The letter also emphasized that confidentiality would be maintained throughout this current study. To ensure participants' privacy and confidentiality, the questionnaire did not ask questions about participants' names or emails, and participants had an ID code in place of a name upon distributing the gift cards. Qualified participant candidates were required to sign a consent form. The potential benefits of this current study were clearly communicated to enhance participant motivation. In addition, the first question of the questionnaire required potential participants to consent to participate in the study. Whether a participant qualified to move forward and complete the questionnaire was dependent on whether the participant provided consent.

The data were gathered from South Carolinian high school teachers who work in low SES schools. Teachers at low SES schools were targeted because they may work with more students who experience ACEs [31]. The target population for this study was teachers who worked in four of the thirty-eight high schools in South Carolina that met the criteria for this study. The total population of currently employed educators in these four Title I South Carolinian schools was approximately 250 teachers.

Before data collection, a power analysis was conducted to determine the minimum required sample size, the effect size, and the significance level for this study. A sample size of 87 was found to be satisfactory. Due to the small size of the participants, the researchers targeted all 250 high school teachers serving at Title 1 schools in the State. To encourage maximum participation, the participants were offered a random selection of five participants to receive a \$20.00 gift card. One hundred thirty-one (131) usable cases were used for the analyses. A detailed letter describing the

purpose of this research and the steps involved in gathering and analyzing the data were shared with potential participants through staff email. The letter emphasized that confidentiality would be maintained throughout the study and secured by the Institutional Review Board's approval from the authors' university.

### **4.3 Instrumentation and Measures**

An online questionnaire with 51 questions was used to gather data. The first section of the questionnaire consisted of four questions related to participants' demographic information and school attributes. Responses to these questions were used to answer RQ2 and RQ3. The second section of the questionnaire included a total of 24 items from the ProQOL Scale developed by Stamm [29]. Participants were asked to rate their experiences at work on a five-point scale where "1" was "never" and "5" was "very often." Six items were used to measure CF, and six were used to measure BO. The other 12 items were used to measure participants' levels of satisfaction. Sample items for each potential outcome of teachers' exposure to STS include the following: "I am happy that I choose to work in education (CF)," "My workplace is an extremely harsh place to work (BO)," and "I feel supported by my colleagues (SOS)." Section 3 of the questionnaire included six items developed to measure teachers' degrees of ITR from the teaching profession. Participants were asked to rate their experiences at work on a five-point scale where "1" was "never" and "5" was "very often." The sample item for ITR includes the following: "I think about leaving my job due to the trauma my students experience." The test-retest reliability was evaluated using intraclass correlation coefficients with a value greater than 0.70, which signals reliability. A Cronbach's alpha coefficient greater than or equal to 0.70 indicates that the scale is reliable [32].

Section 4 of the questionnaire included a 16-item measure of the STSS developed by Bride et al. [28]. The STSS items are used to indirectly measure the reactions of individuals exposed to trauma while working with individuals directly experiencing trauma [33]. The scale on the questionnaire helped quantify the percentage of teachers who were experiencing STS. These questions measured STS exposure and the severity of the STS that the participants were experiencing. The STS comprised seven-item "avoidance," five-item "intrusion," and four-item "arousal" dimensions. Sample items of STS dimensions include the following: "I felt emotionally numbed at times because of my work (Avoidance)," "My heart started pounding when I thought about my work with students (Intrusion)," and "I had trouble sleeping (Arousal)." These questions in the combined sections answered RQ1. Studies by Bride and colleagues [34] and Ting and colleagues [33] concluded that the STSS is a reliable unidimensional measurement scale for exploring STS exposure. Bride and colleagues [34] further recommended exploring the scale's validity, while Ting and colleagues [33] reported high internal consistency reliability when using the STSS as a unidimensional measure.

### **4.4 Data Analysis**

The composite measures of scales and sub-scales were included in the analyses (see Table 1). Descriptive and multivariate analyses were conducted to analyze the data for research questions. To answer RQ1, a multiple regression analysis was conducted to examine whether STS symptoms, individually or collectively, were significant predictors of the observed outcomes among teachers in low SES schools. The analyses explored the predictive relationship between specific STS symptoms (arousal, avoidance, and intrusion) and the outcomes, including CF, BO, SOS, and ITR. One-way



ANOVA analyses were conducted to answer RQ2 and RQ3. The ANOVA was utilized to examine the differences between male and female teachers across multiple outcome variables such as CF, BO, SOS, and the ITR (research question 2). To answer RQ3, a one-way ANOVA was used to analyze the potential differences between novice and veteran teachers across various outcome measures.

**Table 1** Cronbach's Alpha Coefficients for Study Variables.

Scale	Cronbach's Alpha	Cronbach's Alpha (Standardized Items)	Number of Items
CF Scale	0.890	0.891	6
BO Scale	0.851	0.851	6
SOS Scale	0.403	0.397	1
ITR Scale	0.881	0.882	6
STS: IntruTrauma Scale	0.830	0.832	5
STS: AvoidTrauma Scale	0.904	0.904	7
STS: ArousTrauma Scale	0.890	0.891	4

Note: CF = Compassion Fatigue, BO = Burnout, SOS = Secondary Traumatic Symptoms, and RTS = Intention to Resign.

## 5. Findings

This section is organized into three sub-sections. First, the data screening procedures are discussed. The following section discusses the descriptive statistics for participants and study variables. Lastly, the results for each research question are presented.

### 5.1 Data Screening

The dataset underwent thorough screening before the multivariate analyses were conducted to ensure accuracy and completeness. This included checking for outliers, errors, and missing data. Out of 133 questionnaires submitted, 131 were deemed complete and valid for analysis, with two incomplete questionnaires removed from the dataset.

Cronbach's Alpha coefficients were calculated for each scale to assess the reliability of the measurement scales used in the study. Cronbach's alpha measures internal consistency reliability, indicating the extent to which items within a scale are correlated and measure the same underlying construct. The scales assessed included STS across its dimensions of intrusion, avoidance, and arousal, as well as CF, BO, SOS, and ITR from the teaching profession.

Table 2 displays the reliability test results, which indicate strong internal consistency for most scales, with Cronbach's Alpha coefficients above 0.70, considered acceptable. However, the SOS Scale exhibited a lower Cronbach's Alpha coefficient (0.403), suggesting potential issues with the reliability of the single item comprising this scale. Netemeyer and Bearden [35] suggest a test-retest of "one-item" scales if the Cronbach alpha is low. The SOS scale was removed from further analyses as a test-retest was not possible in this cross-sectional study. Further investigation into the composition and structure of the SOS Scale may be warranted to improve its reliability.

**Table 2** Teacher’s Tenure.

Tenure	Frequency	Percent	Valid Percent	Cumulative Percent
0 to 3 years	51	38.9	38.9	38.9
4 to 10 years	34	26.0	26.0	26.0
11 plus years	46	35.1	35.1	35.1
Total	131	100	100	100

Despite the limitation of the SOS scale, the robust Cronbach's alpha coefficients for the remaining scales support the questionnaire's overall reliability. These findings provide confidence in the internal consistency of the measurement instruments used in the study. It is important to note that while internal consistency reliability is essential for ensuring the coherence of measurement scales, it does not address other aspects of validity, such as construct validity. The next section discusses the descriptive statistics for each research question.

## 5.2 Descriptive Statistics

### 5.2.1 Descriptive Statistics of Participants

The participants were secondary school teachers working in Title I South Carolinian schools that were designated as unsatisfactory or below average. One school district consented to participate in the study. This district has six high schools, four of which are considered Title I. All four Title I high schools agreed to participate in this study. The four schools had a population of approximately 250 certified teachers. The sample collected for this current study consisted of 131 staff members who completed the entire questionnaire.

The majority of the participants were female. More specifically, 93 (69.9%) teachers were female, and 40 (30.1%) were male. As Table 2 shows, 52 of the teachers (39.1%) were novice teachers with only 0-3 years of experience. Eighty-one of the teachers (60.8%) were considered veteran teachers with four or more years of teaching experience.

### 5.2.2 Descriptive Statistics of Variables

Prior to conducting the multivariate analysis, bivariate correlation analyses were run to examine the relationships between the variables. The bivariate correlation analysis provides insight into the preliminary associations between STS and the outcome variables of CF, BO, and the ITR from the teaching profession (Table 3). The results revealed significant correlations between STS and two (CF and BO) out of the three outcome variables.

**Table 3** Bivariate Correlations among Variables.

	CF Average	BO Average	ITR Average
STS	-0.606**	0.675**	0.715**
N	131	131	131

Note: CF = Compassion Fatigue, BO = Burnout, SOS = Secondary Traumatic Symptoms, and RTS = Intention to Resign.

\*\*  $p < 0.001$  and \*  $p < 0.05$ .

Avoiding violations of assumptions of the statistical test, notably the homogeneity of variance and normal distribution within groups, is critical to ensuring the robustness of comparisons [36]. The homogeneity of variance assumption postulates equality among the compared groups and normal data distribution within each group. Levene’s Test for Equality of Variances assessed homogeneity for each research question. In addition, the Shapiro-Wilk was used to examine the normality of data used for the research questions [37]. These thorough preliminary analyses were conducted to ensure no significant violations of the statistical test assumptions and to ensure the reliability of the comparisons made within and between groups.

### 5.3 Results

This section presents the results of each research question.

#### 5.3.1 The First Research Question

The first research question sought to answer to what extent secondary traumatic symptoms predict the levels of compassion fatigue, burnout, sense of satisfaction, and intention to resign among teachers working in low socioeconomic status schools. Preliminary analysis was conducted to see whether co-variates (e.g., gender, tenure, and school size) statistically influence the dependent variable ITR. None of the covariates significantly influenced ITR. Thus, the outcome of covariates was not reported, and they were not included in further analyses.

As Table 4 demonstrates, results indicate significant associations between STS and CF, as well as BO, suggesting that higher levels of STS are associated with increased levels of CF and BO among teachers. Additionally, a significant positive relationship was found between STS and the ITR, indicating that higher levels of STS are associated with a greater ITR from the teaching profession. Furthermore, the overall prediction of the model indicates that approximately 36.2% of the variance in CF, 45.2% of the variance in BO, and 50.8% of the variance in ITR can be explained together by all the independent variables.

**Table 4** Regression Analysis Summary of STS Predicting CF, BO, and the ITR.

Variables	R	R <sup>2</sup>	B	t	p
Compassion Fatigue	0.606	0.362	-0.487	-8.654	<0.001**
Burnout	0.675	0.452	0.663	10.400	<0.001**
Intention to Resign	0.715	0.508	0.834	11.628	<0.001**

Note: \*\* $p < 0.001$ .

#### 5.3.2 The Second Research Question

The second research question sought to answer whether the relationships between secondary traumatic symptom outcomes of compassion fatigue, burnout, sense of satisfaction, and the intention to leave the teaching profession differ by teachers’ tenure in low socioeconomic schools. Table 5 provides the differences in STS outcomes between novice and veteran teachers in low SES schools relating to CF, BO, and the ITR. The ANOVA analysis revealed a statistically significant difference between novice and veteran teachers in BO, SOS, and ITR. In all three cases, novice teachers experienced a higher level of BO and ITR than veteran teachers. However, there was no

statistically significant difference between novice and veteran teachers regarding CF. For CF, the ANOVA did not yield statistically significant differences between novice and veteran teachers  $F(1, 128) = 1.663, p = 0.194$ . This suggests that contrary to the initial hypothesis, the level of CF was not significantly different between novice and veteran teachers.

**Table 5** Outcomes of ANOVA Analysis for Research Question 2.

Groups	Dependent Variables	Sum of Squares	df	Mean Square	F	Sig.
Novice/Veteran	CF	1.555	1	0.777	1.663	0.194
Novice/Veteran	BO	9.421	1	4.710	7.432	<0.001**
Novice/Veteran	SAS	1.074	1	0.537	4.008	0.019*
Novice/Veteran	ITR	9.733	1	4.866	5.205	0.007*

Note: CF = Compassion Fatigue, BO = Burnout, SOS = Secondary Traumatic Symptoms, and RTS = Intention to Resign.

\*\*  $p < 0.001$  and \*  $p < 0.05$ .

Analyzing the data to answer RQ2 about the teachers’ experience revealed novice teachers’ heightened vulnerability to STS, BO, and the ITR from the teaching profession. These findings highlight the multifaceted nature of educators’ experiences, emphasizing the need to address STS-related symptoms to bolster educators’ well-being and retention within the profession. When examining BO, the ANOVA revealed a statistically significant difference between novice and veteran teachers  $F(1, 128) = 7.432, p < 0.001$ . Specifically, novice teachers reported higher levels of BO than their veteran counterparts.

The ANOVA results for the ITR also revealed a statistically significant difference between novice and veteran teachers  $F(1, 128) = 5.205, p = 0.007$ . Novice teachers expressed a stronger ITR from their positions compared to veteran teachers, highlighting the potential impact of experience on teachers’ commitment to remaining in the profession despite the challenges faced.

### 5.3.3 The Third Research Question

The third research question sought to answer whether there was a statistical difference between male and female teachers in their experiences of secondary traumatic symptom outcomes of compassion fatigue, burnout, satisfaction, and the intention to leave the teaching profession in low socioeconomic schools. Prior to running the ANOVA, descriptive statistics were reported for this research question, which asked about variables of interest, mean scores, and standard deviations for both male and female teachers. Table 6 below displays the correlations between STS and the various outcome variables among teachers in low SES schools. It also provides the results of Levene’s Test for Equality of Variances for each outcome variable. The Levene’s Test results indicated no significant differences in variances for all outcome variables. The ANOVA was used to explore the outcomes for RQ3 further.

**Table 6** Comparison of Means, Variances, and T-Test Results between Male and Female Teachers in Low SES Schools.

Outcome Variables	Levene’s F	Levene’s Sig.	t-test	t-test Sig.	df	p-value
CF Average	0.923	0.338	2.108	0.018	129	0.018**
BO Average	0.187	0.666	-0.677	0.250	129	0.250
SOS Average	3.471	0.065	-0.177	0.430	129	0.430
ITR Average	0.032	0.858	-0.459	0.323	129	0.323

Note: CF = Compassion Fatigue, BO = Burnout, SOS = Secondary Traumatic Symptoms, and RTS = Intention to Resign.

\*\*  $p < 0.001$  and \*  $p < 0.05$ .

The t-test results reveal mixed findings regarding the comparison of mean scores between male and female teachers working in low SES schools. For CF, there was a statistically significant difference between male and female teachers ( $t(129) = 2.108, p = 0.018$ ), suggesting that male teachers experience higher levels of CF compared to female teachers. Conversely, no significant difference was found between male and female teachers for the BO Average, regardless of assuming equal or unequal variances. Similarly, no significant differences were observed for the SOS Average and the IRT Average between male and female teachers.

The outcomes of the ANOVA analysis for RQ3 are displayed in Table 7. The data demonstrated significant predictive links between STS and adverse outcomes while partially supporting gender-related disparities with CF. For the dependent variable CF, a statistically significant difference was observed  $F(1, 129) = 4.444, p = 0.037$ . Ludick and Figley [17] used “other life demands” as a variable that can directly lead to STS, CF, and BO. Male educators may encounter CF before female teachers. It is worth investigating this further to determine if prolonged exposure to children's suffering or other life demands are influencing CF in male educators. In contrast, the ANOVA did not reveal a significant difference between male and female teachers ( $F(1, 129) = 0.458, p = 0.500$ ) for the outcome variable BO.

**Table 7** Outcomes of ANOVA for Research Question 3.

Groups	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Male/Female	CF	2.043	1	2.043	4.444	0.037*
Male/Female	BO	0.320	1	0.320	0.458	0.500
Male/Female	SAS	0.004	1	0.004	0.31	0.860
Male/Female	ITR	0.211	1	0.211	0.211	0.647

Note: CF = Compassion Fatigue, BO = Burnout, SOS = Secondary Traumatic Symptoms, and RTS = Intention to Resign.

\*\*  $p < 0.001$  and \*  $p < 0.05$ .

The ITR results from the ANOVA analysis revealed no statistically significant difference between male and female teachers ( $F(1, 129) = 0.211, p = 0.647$ ). Based on the data reported for this test, there was no statistically significant difference in intention to retire between male and female teachers. These findings suggest that while there was a significant difference in CF between male and female teachers, there were no significant differences in BO and ITR between male and female

teachers. These results would provide insights into the potential gender disparities in specific STS outcomes among teachers in low-SES schools.

## 6. Conclusions

The analysis for the first research question revealed that CF, BO, and the ITR could be predicted by the STS that teachers in low SES schools experience. Secondary traumatic symptoms are rooted in exposure to indirect trauma and manifest in intrusive thoughts, avoidance behaviors, and heightened arousal among educators [15]. Nicholls et al. [38] and Ludick and Figley [17] highlighted the complexity and inevitability of STS in helping professions such as teaching. The results from this study indicate that STS is predictive of CF, BO, and ITR in the teaching profession in low-SES schools. These results reinforce the existing literature attributing STS as a critical factor influencing educators' well-being and professional fulfillment [28, 29].

By building on Salston and Figley's [39] research, this study extends the implications of the CFR model developed by Ludick and Figley [17]. Additionally, the results from this study highlight the potential negative influences of STS on teachers' cognitive schemas and satisfaction levels. The findings from this research underscore the critical need to address STS in the educational context, recognizing its influence on educators' psychological well-being, cognitive frameworks, and overall satisfaction levels. The integration and exploration of the CFR model, alongside the CF model in this study, enhance the understanding of STS-related variables and their repercussions on individuals working in helping professions.

Ludick and Figley's [17] CFR framework and Figley's [17] CF model provide a comprehensive lens to explore the predictive relationships between STS and CF, BO, and ITR outcomes. According to the CFR model, certain factors influence STS among educators working with students with ACEs, which may include prolonged exposure to those suffering, reliving traumatic events through the experiences of others, self-care, and lowered satisfaction. This directly aligns with RQ1, highlighting the influential role of STS in shaping educators' well-being, satisfaction, and intention to remain in the profession. The findings from the data analysis in RQ1 support the CFR framework, establishing a significant predictive link between STS symptoms and three of the studied outcomes, including CF, BO, and the ITR.

The ANOVA analyses revealed a statistically significant difference between novice and veteran teachers in BO and ITR. In all three cases, novice teachers experienced a higher level of BO and ITR than veteran teachers. However, there was no statistically significant difference between novice and veteran teachers regarding CF. The findings resulting from addressing RQ2 align with findings in the literature, addressing the dire situation of novice teachers leaving the profession within the first few years of employment [24]. As the CFR model suggests, a lack of satisfaction, insufficient social support, prolonged exposure to suffering, and other life demands contribute to developing STS, BO, and an increased ITR for novice teachers. Analyzing the data to answer RQ2 about the teachers' experience revealed novice teachers' heightened vulnerability to STS, BO, and the ITR from the teaching profession. These findings highlight the multifaceted nature of educators' experiences, emphasizing the need to address STS-related symptoms to bolster educators' well-being and retention within the profession.

Research question three investigated STS's predictive relationship and gender-based variations, affirming Ludick and Figley's theoretical frameworks. The data demonstrated significant predictive

links between STS and adverse outcomes while partially supporting gender-related disparities with CF. Ludick and Figley [17] used “other life demands” as a variable that can directly lead to STS, CF, and BO. Male educators may encounter CF before female teachers. It is worth investigating this further to determine if prolonged exposure to children's suffering or if other life demands are influencing CF in male educators [17]. These findings underscore the importance of acknowledging and addressing gender-specific factors influencing teacher well-being in educational contexts characterized by socioeconomic challenges. Additionally, the lack of evidence for statistically significant differences in certain outcomes highlights the need for nuanced support mechanisms tailored to the diverse needs of educators across gender lines in low SES settings.

## **7. Implications**

The findings from this study would offer valuable insight that can be applied to (a) policy, (b) practice, and (b) research (i.e., theory) within the educational field.

### **7.1 Implications for Policy**

Teacher attrition is undoubtedly the number one policy issue in the United States and worldwide. The record numbers of teacher attrition are costly to nations, states, and local communities and, more importantly, detrimental to the learning of future generations. Policymakers are in need of guidance in understanding the contributing factors to teacher attrition and formulating policies to slow down and eradicate the detrimental conditions. Such policies are particularly needed for the low SES-status communities and schools as teacher attrition is particularly high in these schools.

The current study targeted teachers' STS, one of the leading factors that create detrimental conditions in low SES school districts and schools. More specifically, it examined the influences of teachers' STS exposure on adverse conditions, including teachers' CF, BO, and ITR. The findings of the study showed that teachers' exposure to STS is a statistically significant factor for all three detrimental conditions that lead to teachers' exit from the profession, particularly in low-SES status communities and schools. Equipped with the study's findings, policymakers may formulate policies targeting teachers' STS to prevent their CF, BO, and ITR.

### **7.2 Implications for Practice**

Similar to the policy implications, the findings of the study may also inform practicing district and school leaders in developing practices to prevent teachers' exposure to STS, thus controlling detrimental outcomes that lead to teachers' attrition. More specifically, the findings of the study verify the need for interventions and specific support targeting preventative exposure to STS for educators [40]. Ludick and Figley [17] stated that exposure to STS may be unavoidable in helping professions. School and district leaders must still develop these interventions to help alleviate the adverse effects on teacher well-being and retention due to STS [17]. Additionally, O'Toole and Dobutowitsch [41] discuss how trauma-informed approaches in schools help educators develop a contextual understanding of the rational children have when they are exhibiting challenging behaviors. They suggest that teachers who have positive attitudes about trauma-informed care are more likely to build resilience, compassion, and empathy for students with ACEs. Practices centered

on trauma-informed approaches may reduce STS and BO, increase satisfaction, and lower the ITR for teachers [41].

In this sense, study findings have important implications for educators' well-being and the need for retention and strategies to be implemented in low-SES schools. The pervasive influence of STS on educator outcomes indicates the need for targeted interventions aimed at mitigating STS and the detrimental effects it causes with CF, BO, satisfaction, and the ITR from the teaching profession. Identifying similarities in the statistically significant reported findings about STS and CF, BO, and the ITR across different teacher groups and genders highlights the importance of implementing strategies that support teacher well-being and mitigate STS as well as the outcomes.

Beyond the findings on adverse conditions created by teachers' exposure to STS, the study also provided insights regarding the influence of select teacher-specific attributes (e.g., gender and work experience) on CF, BO, and ITR. Such findings would allow educational leaders to create practices that complement individual needs. Aligned with the study's findings, educational leaders may implement strategies targeting male teachers' high composition fatigue. Similarly, the district and school leaders would develop and implement specialized strategies for STS, CF, BO, and ITR for novice and seasoned teachers.

The findings revealed that novice teachers experience a statistically significant difference in the level of BO and ITR from the teaching profession compared to veteran teachers. These findings are consistent with previous research [42], which suggested that STS may affect both novice and veteran teachers equally in low SES environments; however, novice teachers are leaving the profession at much higher rates. Kaplan [43] stated that educators who receive support through effective mentoring initiatives feel more connected to the school, build efficacy, and lower attrition.

Although this study did not examine "attrition" as a study variable, it is the ultimate outcome variable of our study variables, STS, CF, BO, and ITR. As discussed in early sections, attrition is the number-one policy issue not only in South Carolina but also across the United States and the world. The findings of this study may help district and school-level educational leaders in and beyond South Carolina understand the adverse influences of teachers' STS on their CF, BO, and ITR of STS. Equipped with such understanding, the educational leaders may engage in practices that better manage teachers' STS in schools.

### **7.3 Implications for Research**

The study's findings also have implications for the theory and relevant literature on the Compassion Fatigue Resilience model. Overall, the findings were complementary to the relevant literature. An unexpected outcome from this study was that the strength of the association varied across variables, with a higher statistical significance observed for CF male teachers versus female teachers. As Ludick and Figley [17] discussed using the Compassion Fatigue Resilience model, potential explanations may relate to other life demands and depersonalization. Stamm [29] stated that one way to prevent CF is to identify its characteristics and reinforce teachers' job satisfaction derived from daily meaningful work.

The results are consistent with existing research that states that all individuals who work in a helping profession are at risk for CF and the development of STS, which may happen gradually over time [15]. O'Toole and Dobtowitz [41] discuss how self-compassion is one practice an educator can develop to mitigate CF. Self-compassion is positively associated with life satisfaction, optimism,



personal initiative, and overall happiness. To have self-compassion, an individual must work to understand the pain they experience and extend warmth and kindness to themselves.

Differences between female and male teachers align with the existing literature emphasizing comparable STS experiences between male and female teachers working in low-SES schools [25]. According to Westover [26], potential explanations for the differences could involve societal gender norms influencing job perceptions or workplace dynamics as it relates to equal pay, promotional advancements, and opportunities for professional development [26]. Embedding workplace measures that support teachers who are more susceptible to CF could further protect teachers' well-being and may help lower that ITR from the teaching profession.

The next section will discuss the recommendations to address the above implications of the study's findings.

## **8. Recommendations**

The findings of the study suggest several recommendations. The first recommendation is to implement support programs for all educators that address mental health services. Developing and implementing these specific targeted support programs may help mitigate STS among educators. According to Chen [44], workplace policies that promote a supportive work environment where teacher values and well-being are implemented may help educators develop positive workplace dispositions. Examples of workplace policies that can be implemented include mental health services that can be offered through the school or through the school district. Services that are focused on counseling for personal or work-related challenges, a wellness program that promotes a healthy lifestyle, peer support groups, and workshops on topics such as stress management, self-care, resilience building, and identifying mental health issues, also may help reduce STS, CF, BO, poor satisfaction, and the ITR from the teaching profession.

Although this study did not examine, the literature suggests additional strategies such as mindfulness exercises, a soothing room for de-escalation, peer support groups to combat isolation, and ensuring staff members have access to community resources for mental health services. These may be directions for future research. O'Toole and Dobutowitsch [41] discussed that mindfulness is being aware of moment-to-moment experiences without judgement. Implementing mindfulness practices for students and staff could positively influence school culture, increase morale, and contribute to building resilience within the school. Consistently embracing mindfulness strategies may lead to the development of self-compassion, which is positively associated with satisfaction.

Kaplan [42] stated that having access to a number of supportive resources can help teachers feel connected to the school, help build a sense of competence in teaching, and help reduce BO. Connectiveness to a school reduces feelings of isolation for educators. Feeling isolated lowers self-efficacy while increasing BO for teachers. Salston and Figley [39] stated that social support and voluntary targeted intervention should be available to workers to help build resilience and increase self-efficacy. Interventions to build resilience and self-efficacy may mitigate the exposure to STS, CF, BO, and the ITR while also increasing job satisfaction. This suggestion is supported by the statistically significant predictive relationship found between STS and the predictive outcomes of CF, BO, and the ITR, emphasizing the need for proactive support mechanisms.

Bottiani and colleagues [45] discuss the benefits of professional development or training modules focusing on stress management, resilience-building strategies, and self-care practices.

These mental health support initiatives should be aimed at addressing STS-related challenges that educators face when working with students who have ACEs. Acknowledging STS and learning about the correlations between STS and CF, BO, satisfaction, and the ITR from the profession could benefit educators through skill-building initiatives aimed at managing and mitigating these outcomes [44]. School and district leaders should work to foster a positive school climate by integrating policies, programs, and practices that create a supportive and empathetic work environment for staff and students [17].

Differences between novice and seasoned teachers suggest implementing a mentorship or teacher induction program for novice teachers that focuses on managing stress and challenges. Induction programs also need to focus on building relationships between colleagues to reduce feelings of isolation. According to Kaplan [43], induction programs that require mentorship can have a positive influence on novice teachers. Moir [46] states that supportive schools that foster collaborative relationships between professionals are necessary for teacher retention. Collaborative relationships among educators reduce feelings of isolation and build teacher capacity. A mentorship or induction program for novice teachers can reduce feelings of isolation, which is a direct pathway to STS and CF [17]. Topics should be carefully selected that support novice teachers in not only educating students but also helping build resilience to mitigate STS and BO and lower the ITR.

Another recommendation is to offer professional development programs to teachers in both groups that focus on emotional resilience training. Resilience is a process that helps to sustain teacher well-being and manifests itself through professional growth, commitment, enthusiasm, and satisfaction [47]. Professional development on resilience can equip teachers with tools to manage stress and adopt self-care practices to alleviate STS exposure, CF, BO, poor satisfaction, and lower teacher attrition rates. Hallinan [48] argues that with proper consistency and practice, self-care skills, and healthy patterns, CF and BO can be mitigated or prevented. These professional development programs can include but are not limited to yoga, mindfulness practices, social-emotional awareness programs, trauma-informed care practices, or other self-care practices. Fernandes et al. [47] state that resilience is rooted in relationships between colleagues, school leaders, and students.

Findings on the differences between female and male teachers suggest that school and district leaders consider creating gender-sensitive and specific support programs to address the varying needs of educators that may enhance CF resilience. The CFR model addresses individuals' paths to increase resilience and lower CF. Hobfoll and colleagues [49] suggest that resilience is critical to helping individuals reduce stress.

An additional recommendation would be to implement workplace strategies that acknowledge potential gender-based differences in managing STS and its outcomes. According to Naseem and Munaf [50], males and females utilize different strategies to build resilience. Environmental factors influencing resilience include biological and genetic makeup, personality traits, coping mechanisms, personal aspirations, and social support. Gender-specific professional development opportunities could help promote a supportive work environment. Gender-specific professional development opportunities could also contribute to a cohesive and positive school culture, increasing teacher job satisfaction. School and district leaders should regularly assess and analyze gender-based differences in STS experiences and outcomes of CF, BO, and the ITR to effectively tailor the developed interventions and support programs.

The present study attempted to shed light on the predictive nature of STS concerning CF, BO, satisfaction, and the ITR from the profession of teachers in South Carolina working in Title I,

secondary, low-SES schools. It added to the limited existing literature specific to teachers and STS they may experience because of their work with students with ACEs. Future research that can extend and deepen the understanding of how teachers are at risk for exposure to STS may help school leaders implement interventions to help mitigate CF, BO, and the ITR occurring in schools nationwide.

This study has unexplored dimensions, methodological constraints, and many potential avenues for further investigation. For instance, the current study did not attempt to test the factor structure of the three-factor ProQOL model. The significant bivariate correlations between CF, BO, and ITR scales suggest that it would be wordy to test this model against alternative models. Future studies may test this model's structure. Addressing these aspects is important to contribute to the existing knowledge base and pave the way for tailored interventions and support strategies that may help educators' well-being and lower attrition rates in the nation's schools. Future researchers could conduct longitudinal studies to investigate the long-term effects of STS on teachers' well-being and their professional longevity. Different variables could be measured at different points in time, including STS, CF, BO, satisfaction, and the ITR. Research like this would entail multiple data collection points over an extended period to provide better insight into STS and its overall influence on educators' mental health.

Future research on STS exposure could expand the sample size to include a broader range of schools beyond Title I secondary schools in South Carolina with an unsatisfactory or below-average designation by the South Carolina Department of Education. For example, participants could be from different regions, SES backgrounds, or different schools in general, which may not be considered satisfactory or above average. Including different types of schools could enhance the generalizability of the findings, allowing for a more comprehensive understanding of STS and its effects on teachers.

The current study focused on direct relationships between the study variables, while indirect relationships also occur in real-life contexts. Future research may also examine mediating and moderating relationships between the study variables. For instance, a mediation model could examine the mediating influence of teachers' STS, CF, BO, and satisfaction on the relationship between their STS and ITR. Similarly, a moderation model could examine whether teachers' gender and tenure would moderate the relationships between their STS and ITR.

## **9. Limitations**

It is important to consider that several factors might have influenced the results of the research questions, including participant demographics, school attributes, and unaccounted variables. Relying on participants' self-reported data was one of the study's methodological limitations. The self-reports may be biased. Another methodological limitation of the study was its cross-sectional design. Cross-sectional design studies reflect only the time the data is gathered in one snapshot. Future studies may employ longitudinal methodologies to eliminate this limitation. This study was also limited to schools with low-income status. Including different types of schools could enhance the generalizability of the findings, allowing for a more comprehensive understanding of STS and its effects on teachers. The current sample size in this study was a limitation, along with the demographic restrictions. Additionally, the time of year this data were collected could have influenced the participants' answers. Future studies should have a more inclusive participant pool,

not only teachers in low-SES schools. This study was specific to South Carolina, which limited the generalizability of the findings to other regions or different school settings. The study also relied on the participants' self-reporting data through a questionnaire, which might not have captured the entire spectrum of STS experiences or related constructs. Individuals who choose to participate in the study may not reflect the accurate representation of the population due to the potential sampling bias. Consideration should be given to the time of year research is conducted. The questionnaire was administered between October and November of 2023, the beginning of the school year. The reported data may have been different if the questionnaire was administered at a different time in the school year. These factors may have influenced the comprehensiveness of the findings of this study.

### **Author Contributions**

All authors have read and approved the final manuscript. Authors' contributions include the following: Dr. Reilly: Conceptualization, original draft writing, formal analysis, and writing. Dr. Duyar: Conceptualization, research design, methodology, final manuscript writing, and editing. Dr. McBride: Design, review, and editing. Dr. Williams: Design, review, and editing.

### **Competing Interests**

The authors have declared that no competing interests exist.

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